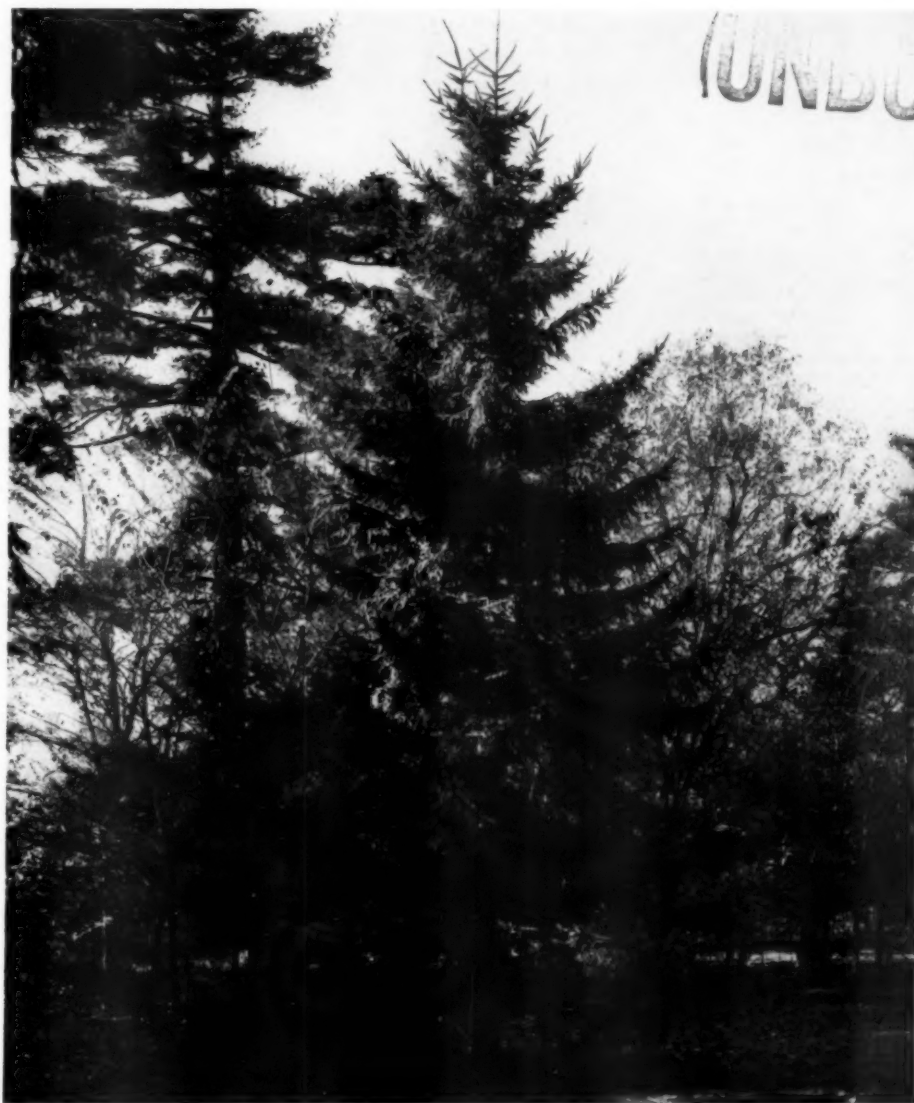


AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

FEBRUARY 15, 1955

TOP STAGE
(UNBOUNDED)



Picea Glehni

SEEDS TREE—SHRUB—PERENNIAL
FLOWER—GRASS—VEGETABLE

HERBST BROTHERS

SEEDSMEN, INC.

678 Broadway, New York 12, N. Y.

Correspondence with seed collectors and growers invited. Free catalog "Seeds for Nurserymen."

6, \$4.305
Am 35.02
Vol. 101

FOREST TREE SEEDLINGS • SHADE TREES • FLOWERING CRAB APPLES

SUPERIOR QUALITY NORTHERN-GROWN

COMBINATION CARS—We will have combination cars to most EASTERN POINTS in late February and March.

This is only a partial listing of our wide selection of general nursery stock. See our Spring Wholesale List for more complete variety selection.

TERMS—Regular. If interested in quantity lots write for special prices.

FOREST TREE SEEDLINGS

Per 100 Per 1000

APRICOT		
2 to 3 ft.	\$ 7.00	\$ 60.00
18 to 24 ins.	5.00	40.00
ASH, GREEN		
2 to 3 ft.	4.00	35.00
18 to 24 ins.	2.90	25.00
12 to 18 ins.	1.90	16.00
6 to 12 ins.	1.20	10.00
CARAGANA ARBORESCENS		
3 to 4 ft.	8.00	75.00
2 to 3 ft.	5.50	50.00
18 to 24 ins.	4.00	35.00
12 to 18 ins.	3.00	25.00
6 to 12 ins.	2.00	15.00
CHERRY, WILD BLACK		
2 to 3 ft.	5.50	50.00
18 to 24 ins.	4.00	35.00
12 to 18 ins.	2.90	25.00
6 to 12 ins.	2.00	18.00
ELM, AMERICAN		
5 to 6 ft.	12.00	...
4 to 5 ft.	7.50	65.00
3 to 4 ft.	4.50	40.00
2 to 3 ft.	3.50	30.00
18 to 24 ins.	2.60	22.00
12 to 18 ins.	1.90	16.00
6 to 12 ins.	1.20	10.00
ELM, CHINESE		
5 to 6 ft.	19.00	160.00
4 to 5 ft.	12.00	100.00
3 to 4 ft.	7.50	65.00
2 to 3 ft.	4.50	40.00
18 to 24 ins.	2.90	25.00
12 to 18 ins.	2.10	18.00
6 to 12 ins.	1.20	10.00
HONEYSUCKLE		
18 to 24 ins.	11.00	100.00
9 to 12 ins.	5.60	50.00
6 to 9 ins.	3.50	30.00
LOCUST, BLACK		
5 to 6 ft.	8.00	75.00
4 to 5 ft.	6.50	60.00
3 to 4 ft.	4.50	40.00
2 to 3 ft.	3.20	28.00
18 to 24 ins.	2.40	20.00
12 to 18 ins.	1.70	14.00
6 to 12 ins.	1.00	9.00

FOREST TREE SEEDLINGS—Cont.

Per 100 Per 1000

LOCUST, THORNLESS HONEY		
3 to 4 ft.	\$ 8.00	\$ 70.00
2 to 3 ft.	5.00	45.00
18 to 24 ins.	3.50	30.00
12 to 18 ins.	2.40	20.00
6 to 12 ins.	1.70	14.00
3/16-in. cal. and up understock	2.00	18.00
MAPLE, SILVER		
2 to 3 ft.	5.50	50.00
18 to 24 ins.	4.00	35.00
6 to 12 ins.	1.70	14.00
OLIVE, RUSSIAN		
3 to 4 ft.	8.00	75.00
2 to 3 ft.	6.00	55.00
18 to 24 ins.	4.50	40.00
12 to 18 ins.	3.00	25.00
6 to 12 ins.	2.00	18.00
OSAGE ORANGE		
18 to 24 ins.	2.40	20.00
12 to 18 ins.	1.80	15.00
6 to 12 ins.	1.20	10.00

FLOWERING CRAB APPLES

Bechtel's, Klehm's Improved		
4 to 5 ft.	135.00	...
5 to 6 ft.	175.00	...
Eley		
5 to 6 ft.	135.00	...
6 to 8 ft.	175.00	...
Eley, Shrub Form		
3 to 4 ft.	75.00	...
4 to 5 ft.	100.00	...
5 to 6 ft.	135.00	...
Floribunda purpurea		
4 to 5 ft.	110.00	...
5 to 6 ft.	135.00	...
Hopa		
5 to 6 ft.	110.00	...
6 to 8 ft.	135.00	...
Hopa, Shrub Form		
4 to 5 ft.	100.00	...
5 to 6 ft.	135.00	...
Mount Arbor		
4 to 5 ft.	110.00	...
5 to 6 ft.	135.00	...
6 to 8 ft.	175.00	...
Niedzwetzkyana, Red Vein		
3 to 4 ft.	80.00	...
4 to 5 ft.	110.00	...

FLOWERING CRAB APPLES—Cont.

Per 100 Per 1000

Red Silver		
3 to 4 ft.	\$ 80.00	...
4 to 5 ft.	110.00	...
5 to 6 ft.	135.00	...
6 to 8 ft.	175.00	...

SHADE AND ORNAMENTAL TREES

ELM, American		
4 to 5 ft., T.	\$ 40.00	...
5 to 6 ft., T.	65.00	...
6 to 8 ft., T.	100.00	...
8 to 10 ft., T.	150.00	...
1 1/4 to 1 1/2-in. cal., T.	200.00	...
ELM, Chinese		
4 to 5 ft., T.	35.00	...
5 to 6 ft., T.	60.00	...
6 to 8 ft., T.	90.00	...
8 to 10 ft., T.	125.00	...
ELM, Moline		
4 to 5 ft., T.	75.00	...
5 to 6 ft., T.	100.00	...
6 to 8 ft., T.	135.00	...
8 to 10 ft., T.	200.00	...
MAPLE, Norway		
2 to 3 ft., whips.	20.00	...
3 to 4 ft., whips.	30.00	...
4 to 5 ft., whips.	50.00	\$450.00
5 to 6 ft., whips.	75.00	700.00
6 to 7 ft., whips.	100.00	900.00
7 to 8 ft., whips.	135.00	...
8 to 9 ft., whips.	160.00	...
MAPLE, Schwedler		
5 to 6 ft., whips.	135.00	...
6 to 7 ft., whips.	175.00	...
7 to 8 ft., whips.	200.00	...
8 to 10 ft., branched.	375.00	...
1 1/4 to 1 1/2-in. cal.	450.00	...



ESTABLISHED 1875

One of America's Foremost Nurseries

Mount Arbor Nurseries

• SHENANDOAH IOWA •

AMERICAN NURSERYMAN

[Registered U. S. Patent Office]

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

VOL. CI, No. 4

FEBRUARY 15, 1955

Founded 1904
With which was merged 1939
THE NATIONAL NURSERYMAN
Established 1893



Published on the
first and fifteenth
of each month by the
AMERICAN NURSERYMAN
PUBLISHING COMPANY
343 South Dearborn Street,
Chicago 4, Illinois.
Telephone: WAbash 2-9011



Subscription Price:
\$4.00 per year; outside
United States, \$5.00;
Single Copies, 20c.



Advertising Rates
On Application.
For Closing Dates
See Next Page.



Entered as second-class matter
December 14, 1933, at Chicago,
Ill., under act of March 3, 1879.

CONTENTS

Canadian Association Meets	7
Tennessee Celebrates 50th Anniversary	9
Arborists' Day Opens Twenty-Sixth Annual Event	10
By P. A. Barker	
O. N. A. Hears Talks on Varied Topics	11
By Kenneth W. Reisch	
Indiana Arborists Meet	12
By Robert C. Simpson and Donald Schuder	
Indiana Association Meets at Purdue	13
By Robert C. Simpson	
Hollies in the Southeast	14
By Charles A. Young, Jr.	
Maryland Discusses Trade Problems	15
By George S. Langford	
Selling Chief Topic at Oklahoma City	17
By Betty H. Prim	
Miami Stages Plant Show	18
Washington Winter Convention	19
By John B. Strander	
Western New York Group Reviews State Problems	20
By William E. Snyder	
P. O. Approves Polyethylene Wraps	21
Top Speakers Fill Two Days at Long Island School	22
By Daniel Dowd	
Plant Notes Here and There	62
By C. W. Wood	
Ohio Nurserymen's Day Reveals Recent Research	100
By Thomas S. Pinney, Jr.	
Ohio Landscape Day Talks on Plant Topics	112
By John L. Rice	



Editorial	6	—Paul Fisker	46
—Cycles Within Cycles	6	—Cornelius Faddegon	46
—Proposed Postage Raises	6	—Henry Kuehl	46
—Protect Public	6	This Business of Ours	70
A. A. N. Convention Plans	8	—Natural Seed Dissemination	70
Tennessee President	9	Northern California Institute at	
Maryland President	15	Davis	78
Southern Association	16	Los Angeles Group Meets	82
Oklahoma President	17	Advertising Main Topic of Oregon	
Mail Order Founders	21	Meeting	84
Landscape Sales Critic at Virginia		Texas Turf Meeting	97
School	30	Cover Illustration	99
White Awarded Medal	32	—Picea Glehni	99
New England Meetings	34	Research in Marketing	99
—Massachusetts Meeting	34	Michigan Group Banquet	111
—Connecticut Course	34	Elect at Vancouver	120
Obituary	46	New Arborist Officers	120
—John O. Williams	46	Folder on Building Sales	130
—Raymond P. Cook	46		

INDEX TO ADVERTISERS

Alanwold Nursery	50
Allen Co.	127
Allen Weatherproof Tag Co.	127
American Cyanamid Co.	53
American-Dutch Trading Co., Inc.	114
American Florist Supply Co.	122
American Landscape School	115
American Seedless Watermelon Seed Corp.	76
Ammon, A. G.	79
Andrews Nursery Co.	64
Angelica Nurseries	55
Anna Nursery	70
Anthony Lake Nursery, Inc.	66
Appalachian Nurseries	105
Ariens Co.	105
Armintrout's Evergreen Nursery	72
Arp Nursery Co.	65
Atkin's Sons, L.	123
Bagatelle Nursery	52
Bailey Nurseries, J. V.	64
Barlett Mfg. Co.	108
Bealle, J. B.	74
Bean Div., John	110
Beardslee Nursery	57-68-70-73-74-76-84
Benson-Maclean Plant Products	107
Berryhill Nursery Co.	68
Bird & Son, Inc.	33
Blackwell Nurseries	72
Bobbink Nurseries, Inc.	46
Boulevard Nurseries	52
Bountiful Ridge Nurseries	34
Boyd Nursery Co., Inc.	71
Braden, K. J.	76
Brimfield Iron Works, Inc.	101
Brimfield Gardens	56
Brookfield Gardens	32
Brookville Nurseries	44
Brower's Nurseries	56
Brown Brothers Co.	56
Brown Deer Nurseries	64
Brownell Rose Research Gardens	34
Bryant's Nurseries	56
Buddies Nursery, The	44
Bulk's Nurseries	57
Buntings' Nurseries	55
Burr & Co., Inc., C. R.	39
Campbell-Hausfeld Co.	99
Canales Forest Nursery	40
Carbide & Carbon Chemicals Co.	123
Carleton Nursery Co.	52
Carpenter & Co., George B.	99
Cartwright Nurseries	26
Certified Products Co.	130
Champion Sprayer Co.	116
Chandler Landscape Floral Co.	58
Chase Bag Co.	50
Chase Co., Benjamin	121
Chase Nursery Co.	72
Chick-Dee Gardens	130
Clarke & Co., W. B.	82
Classified Ads	86-87-88-89-90-91-92-93-94-95-96-97
Clearfield Bituminous Coal Corp.	56
Cloverest Flower Farm	47
Cole, R. M.	52
Commercial Nursery Co.	71
Concrete Machinery Co.	130
Co-Operative Rose Growers	49
Cottage Gardens	59-60
Crystal Soap & Chemical Co.	121-126
Cumberland Plateau Nursery	73
Curtis Nurseries	58
Darling Co., J. L.	80
Dayton Fruit Tree Label Co.	128
Deerfield Nurseries	46
Del-Mar-Va Nurseries	52
Del Rancho Fortuna	79
Descanso Distributors, Inc.	84
Dible Nursery, Sam	60-130
Doerfler & Sons, F. A.	80
Dollar Nursery	73
Doly & Doerner, Inc.	79
Eagle Creek Nursery Co., Inc.	73
East Coast Flower Farm	73
Eastern Shore Nurseries	42-74
Eccles Nurseries	56
Edco Corp.	126
Egyptian Nursery & Landscape Co.	58
Elin Mfg. Co.	112
Elmer Roses	85
Evergreen Nursery Co.	62
Fafard, Inc., Conrad	117
Fairview Evergreen Nursery	42
Farm Landscape Co.	72
Felins Tying Machine Co.	114
Felix & Dykhuys	76
Fern Hawaii Co.	126
Flickinger's Nursery	54
Florida Agricultural Supply Co.	123
Flowerwood Nursery	74
Food Machinery & Chemical Corp.	110-118
Forest Nursery Co.	69
Foster Nurseries, Inc.	73
Frankie, Eric	123
Fraser Nurseries, Samuel	52
Garden Shop, Inc.	120
Gardner's Nurseries	55
Geiger Co., E. C.	116
Gelfco, Inc.	107

General Package Corp.	99
Gill Mfg. Co.	114
Gorton's Nursery	40
Green, Howard C.	98
Gresham's Nursery	43
Gro-Quick Sales	125
Growers Exchange, Inc.	30-31
Growers Sign Service	129
Half Moon Mfg. & Trading Co.	124
Halpern Bros.	129
Hansen Bros. Nurseries, Inc.	54
Hartigan, Philip	126
Hawkesmith & Sons Nursery	69
Heasley's Nurseries	55
Heemskerk & Co.	77
Herbst Bros. Seedsmen, Inc.	1
Hess' Nurseries	48
Hill Nursery Co., D.	132
Hobbs & Sons, Inc., C. M.	63
Homestead Nurseries	76
Horsford, William Crosby	55
Horti-Products Co.	99
Houston Evergreen Nursery	84
Howard & Smith, Inc.	85
Howards of Hemet	5
Hubbs & Howe	116
Hummel's Exotic Gardens	81
Humphreys Landscape Service	68
Hyper-Humus Co.	127
Ilgenfritz Nurseries Co.	59
Imperial Tag & Printing Co.	110
Jewell Nurseries	84
Jiffy Balling Co.	104
Johnson's Nursery	72
Johnston, William A.	122
Judson Nurseries	74
Kallay Bros. Co.	67
Kingwood Nurseries	60-70-74
Koster Nursery	52
Krieger's Wholesale Nursery	82
LaBarr's Rhododendron Nursery	34
Laird's Nurseries	62
Lake Sammamish Evergreen Nursery	80
Landseal, A. W.	111
Lansing Specialties Mfg. Co.	127
Leeland Farm	74
Leonard & Son, A. M.	124
Lindig Mfg. Co.	118
Lindley Nurseries	68
Lovett, Lester C.	54
Marx Gardens, Walter	85
Matthews Nursery	63
Maywood Rose Nursery	78
McClung Bros. Rose Nursery	74
McGill & Son, A.	84
McKinich Greenhouses	72
McIntyre Nursery, Robert	87
McKenzie Mfg. Co., F. A.	127
Meehan Co., Inc., Thomas B.	40
Mennes Nurseries, Menno S.	125
Meyer Nursery, M.	68
Midvale Chemical Co.	128
Milton Nursery Co.	80
Minnetonka Publishing Co.	75
Mitiska Nursery	57
Mitsch Nursery	83
Monrovia Nursery Co.	23-80
Moran, E. C.	76
Morning Star Nursery	2
Mount Arbor Nurseries	2
Mount Hood Nursery	84
Mount Vernon Nursery	78
Multiplex Display Fixture Co.	109
Musser Forests, Inc.	28-29
National Landscape Institute	126
Natorp Co., W. A.	67
Naugatuck Chemical Div.	38
Neosho Nurseries Co.	59
New Amsterdam Import Co.	126
Newport Nursery Co.	58
Niagara Chemical Div.	118
Norley Nurseries	52
Norris Fence Co.	109
Nursery Specialty Products, Inc.	120
Nutritional Concentrates, Inc.	108
Offenberg Nursery Co., Paul	54
Oliver Corp.	131
Onarga Nursery Co.	68
Oregon Bulb Farms	82
Owen & Son, T. G.	80
Ozark Nursery Co.	70
Pacific Coast Nursery	81
Pacific Northwest Rose Nursery	84
Pallack Bros. Nurseries, Inc.	37
Palmer & Son, J. R.	66
Paw Paw Plant Co.	79

Peelskill Nursery	48
Perkins Bros.	64
Permark Co.	100
Perry Nursery Co., O. H.	69-72
Peterson & Dering	85
Phytotektor	69
Pluckemin Horticultural Wholesale	129
Plumfield Nurseries	41
Portland Clematis Nursery	83
Portland Wholesale Nursery Co.	84
Possum Hollow Nurseries	58
Premier Peat Moss Corp.	109
Premier Southern Ticket Co.	109
Princeton Nurseries	56
Quackenbush Industries	115
Rambo's Wholesale Nurseries, L. J.	72
Ramsey Co., The L. W.	100
Ravensberg, Maurice C.	77
Reynolds, Harry H.	103
Rich & Sons Nursery	80
Robinson Sales Agency, E. D.	25
Rosapred	120
Roper Mfg. Co.	120
Roseway Nurseries	84
Rough Bros.	106
Royer Foundry & Machine Co.	117
Ryan Landscaping Equipment Co.	102
S-W Supply Co.	108
Sarcocoe Nurseries	61
Scarff's Nursery	67
Schneider Metal Mfg. Co.	121
Schroth's Nursery	24
Schumacher, F. W.	76
Sommer Nursery	82
Sequoia Nursery	72
Shade's Nursery	57
Shenandoah Nurseries	61
Shepard Nurseries	80
Sherman Nursery Co.	59
Sherwood Nursery Co.	84
Shore & Co., J.	128
Siebertthal Co.	59
Sims Fruit & Nursery Farms	71
Sizemore, Charles	116
Smith Corp., W.-T.	58
Smith & Son, Inc.	106
Smith's Forest Tree Nursery	71
Sneed Nursery Co.	106
Snyder Tank Corp.	124
Soilaire Industries	127
Spaargaren, W. J.	77
Springbrook Gardens	57
Standard Engineering Works	108
Stassen Floral Gardens	79
Stedman Nurseries	48
Stenstrom, K. F.	79
Sterling Bag & Burlap Co.	120
Stribling's Nurseries	81
Sudbury Laboratory	130
Summit Nurseries	65
Suncrest Evergreen Nursery	44
Supreme Electric Products	107
Swift & Co.	35
Tankard Nurseries	74
Thilmany Pulp & Paper Co.	51
Thorndale Farm	66
Townson Nurseries, Inc.	52
Trichter's Greenhouses	63
Ullman Co.	123
Union Carbide and Carbon Corp.	111-115
Union Products, Inc.	38
United States Rubber Co.	38
Van Kleef, James A.	123
Van Veen Nursery	79
Vanderbrook Nurseries	44
Verburg, Nick	71
Verhalen Nursery Co.	65-128
Versake's Nurseries	48
Voge Nursery, Inc.	81
Vogt Van Nes Nurseries	77
W-W Grinder Corp.	110
Wade & Gatton Nursery	36
Walker Mfg. & Sales Corp.	130
Want Ads	98
Waynesboro Nurseries	74
Wayside Gardens	60
Weeks Wholesale Rose Grower	83
Weller Nurseries Co., Inc.	62
Western Maine Forest Nursery Co.	42
Westminster Nurseries	44
Whalley, J. B.	84
Wheelock & Turnbull, Inc.	40
Whitehall Metal Studios, Inc.	119
Wight Nurseries	73
Williams, Isaac Langley	46
Williams & Harvey Nurseries	122
Willis Nursery Co.	27
Willowbend Nursery	59
Wilmot Holly Co.	50
Wire Basket Co.	82
Wood Products Co.	71
Woodruff & Sons, Inc., F. H.	19
Yoho & Hooker Greenhouse Co.	124
York Modern Corp.	107

Forms for the March 1 issue will close Friday, February 11.

Forms for the March 15 issue will close Friday, February 25.

Mail copy to arrive at Chicago by these dates — no later!

They're Ready for Shipment!



BARE-ROOT ROSES FROM HOWARDS OF HEMET

We are now digging, grading and shipping previously booked orders to our regular customers. Much to our surprise, earlier field growing estimates of No. 1 grades were exceptionally conservative. We are happy to say we now have No. 1 grade Tiffany, Lilibet and other popular patented and nonpatented varieties available, as well as an excellent assortment of No. 1½ and No. 2 grade rosebushes.

Tiffany is beautiful from bud through full bloom! Golden-yellow based buds shading to a deep pink make a striking contrast to the dark green foliage. Growth habit is upright, vigorous and exceptionally resistant to disease and garden hazards. Blooms are giant size and especially fragrant and long lasting. It is not uncommon to cut stems 20 to 24 inches long. No wonder Tiffany nearly topped the highest A. A. R. S. score on record!

CASH IN WITH NATIONALLY ADVERTISED AND PUBLICIZED TIFFANY!

Full-color advertising and publicity in leading garden and home magazines, newspapers, radio and TV are creating a tremendous demand for the rose that garden editors are saying will be the most popular rose of the decade. Make sure you have a good stock on hand . . . there's going to be a tremendous demand!

Send us a list of your requirements for a quotation. Write today while we can still fill your order with No. 1 grades.

Tiffany

hybrid tea, All-America Rose Selection award winner for 1955. Named to honor Tiffany & Co., New York, known the world over for unexcelled quality.

TIFFANY AND LILIBET ARE HOWARDS OF HEMET ORIGINATIONS



HOWARDS OF HEMET • HEMET, CALIFORNIA

AMERICAN NURSERYMAN

F. R. KILNER
Editor and Publisher

Editorial

CYCLES WITHIN CYCLES

In following the recurrent predictions and observations of professional economists over a period of years for the purpose of transferring pertinent comments to readers of this page, esteem for Sumner Slichter has constantly increased. So special interest seems merited by his current statements in the Harvard Business Review that the business trend in this country is toward greater stability, because the old cycle is being broken up and numerous independent lesser business cycles now tend to offset one another.

He mentioned as a remarkable fact about the recent recession was the way in which some parts of this country's economy resisted the recession and other parts seemed to have been unaffected by it. The country experienced, not a general decline in business, but a decline in some parts of it, accompanied by stability in other parts and by actual expansion in still others.

Among the changes tending to break up the business cycle is the change in financing of building projects. The replacement of short-term mortgages with long-term amortizable mortgages (some of them guaranteed or insured by the government) should prevent the accidental concentration of a large volume of maturities in years of depression and will prevent future recessions from producing large-scale distress selling of real estate.

The policy of the national government in offsetting a drop in defense spending by projects for domestic development is another factor tending toward stability, as is the continuance of the volume of unfilled orders in the durable-goods industry as a matter of national policy. Other influences are unemployment compensation, pension payments and farm price supports, which tend to check declines in personal income. Others are the current great gain in liquidity of business concerns, the rise of technological research and the more thorough planning of the future development of enterprises.

After the years of prosperity which have followed the high wartime levels of employment, grayheaded

nurserymen begin to think of the pendulum reversing its direction. Many of them still have bitter recollections of the depression of 20 years ago. There is conservative tendency in such individuals to delay expansion and promotion with an apprehensive view of the future. If the view of Professor Slichter is correct, the status of the trend in one's own industry is more important than the national picture embracing diverse trends in different fields.

PROPOSED POSTAGE RAISES

While the federal government is taking actions presumed to maintain industrial activity at a high level and to promote the general prosperity of the country, the reverse effect is likely to be seen if postage rate increases are made by Congress in accordance with the request of Postmaster General Summerfield.

The rate increases would affect all classes of mail except fourth class, or parcel post, on which an increase of 35 per cent was obtained in 1953 through the authority of the interstate commerce commission.

Air mail would be increased from 6 to 7 cents on the first ounce, and the regular letter rate, local and out-of-town, would be increased from 3 to 4 cents for the first ounce only, additional ounces remaining at 3 cents.

Second-class mail, affecting principally newspapers and magazines, would receive an increase of 15 per cent annually for two successive years, on top of three annual increases of 10 per cent.

Still heavier is the effect on third-class mail, consisting of circulars, advertising matter and small merchandise packages, which would be increased 28 per cent.

Whether the \$332,000,000 a year which these increases are expected to bring into the federal till will be realized, the increases of 25 per cent and 28 per cent, respectively, on first-class and third-class mail are certain to have effect upon direct-mail advertising and business correspondence. The increase will be felt most by small businessmen, whose sales and advertising are confined to a limited area and, therefore, use mail service for advertising more than the big corporations.

The excessive increase in rates of postage on fourth-class mail, or parcel post, has already created

changes in the methods used by firms in this field to ship small orders, and it may be questioned whether the income to the Post Office Department after the 1953 increase yielded anything like the revenue expected.

When the maintenance of retail sales is so important in this country to keep the wheels of industry rolling at the current high rate, a dampener on advertising by mail seems a doubtful move.

PROTECT PUBLIC

Public alarm at the spread of the Dutch elm disease in the midwest has caused homeowners to give more attention to the spraying, pruning and feeding of their street and lawn trees, to the benefit of their properties and their communities, as well as arborists.

They will all three be losers if no deterrent is found for the persons whose ignorance of tree care is only exceeded by their lack of responsibility. These shysters meet a ready reception from the unwary homeowners who have read of the diseases that threaten their elms and other shade trees. After useless work and possible mutilation has been done and the homeowner has paid an excessive bill does he investigate—too late.

Protection from such shysters will probably be sought in the form of legislation to license commercial arborists, a procedure that has been effective in some states, but less so in others.

But much time will be required to obtain passage of a bill by a state legislature, and more time will be consumed in setting up the machinery for its enforcement. Meantime, the concern about their trees is causing the gullible part of the public to be victimized.

Most newspapers, to their credit, have appended to their articles on the Dutch elm disease a warning that only reliable practicing arborists should be employed. That warning is to the interest of the newspaper's readers and the community, and where it has not been published, the local arborist or nurseryman should appeal to the editor for such action. Better business bureaus are also instrumental in giving public warning. And it is quite opportune for the individual arborist to emphasize this theme in his local advertising, however done.

Plan A. A. N. Convention

Canadian Association Meets

The scenic surroundings of Niagara Falls, Ont., served as the background for the 32nd annual convention of the Canadian Association of Nurserymen. Held at the Sheraton-Brock hotel, January 19 to 21, the convention attracted 130 nurserymen from the United States and Canada. It was agreed by the members that this was the most successful convention in the association's history. Important business was transacted, and instructive talks on propagation and on selling were heard, as summarized in this report.

In an election of officers J. V. Stensson, Sheridan Nurseries, Ltd., Toronto, Ont., was named president; A. B. Luke, Luke Bros. Nurseries, Ltd., Hudson, Que., first vice-president; W. B. Wellington, Stone & Wellington, Ltd., Toronto, Ont., second vice-president, and J. R. Burns, Ottawa, Ont., secretary-treasurer.

Directors are J. H. Eddie, H. M. Eddie & Sons, Ltd., Vancouver, B. C.; N. J. Scott, Brookdale-Kingsway, Ltd., Bowmanville, Ont.; J. E. Shuttleworth, Little Tree Farm, London, Ont.; W. H. Perron, W. H. Perron & Co., Montreal, Que., and G. F. Downham, H. C. Downham Co., Strathroy, Ont.

Elected an honorary president was Harry Endean, Endean Nurseries, Ltd., Richmond Hill, Ont., chairman of arrangements for the American Association of Nurserymen convention next July. Maj. John Connon,

The Nurseries, Waterdown, Ont., continues as honorary president.

Honored at the annual banquet Friday evening were the past and honorary presidents of the Canadian association. President Stensson presented gavels to J. A. Aitken, Ottawa, Ont.; Major Connon; Spencer McConnell, McConnell Nursery Co., Port Burwell, Ont., and T. A. Torgeson, Prairie Nurseries, Ltd., Estevan, Sask.

Of special interest was the announcement by Dr. J. S. Shoemaker, head of the horticulture division, Ontario Agriculture College, Guelph, that Murray Peart had been named as a member of the staff to devote his entire time to nurserymen's problems. Mr. Peart is a recent graduate of the college, and while his nursery experience is limited, it was felt that he would prove most capable.

In a closed business meeting, Thursday morning, January 20, it was decided to abandon the advertising program which so enthusiastically had been inaugurated at last year's convention. While some of the participating members voiced approval of the campaign, it was generally felt that not enough of the members had participated to make it a success. It was concluded that secretarial help for Mr. Burns, which could assist him in disseminating news material to Canadian newspapers and magazines, would prove more beneficial and less expensive.

A resolution was passed raising

the minimum dues of the association from \$15 to \$25, with the rate being \$1 on each \$1,000 of sales up to \$100,000 and 50 cents per \$1,000 on sales from \$100,000 to \$500,000. Over this figure the rate will be 25 cents per \$1,000 of sales. The membership report showed a total membership of 171.

A past presidents' council was formed to avail the association of the knowledge of these members. Action was taken to set up policy and procedure to deal with unfair trade practices. A telegram of congratulations was sent to Malcolm D. Davis, Dominion horticulturist, Ottawa, Ont., who had just retired after 40 active years in this position.

In his secretary-treasurer's report, Mr. Burns explained that in Canada there is a national council of horticulture comprised of representatives of Canada-wide and provincial trade groups and government bodies. It is known as the Canadian Horticultural Council. Having its offices at Ottawa, Ont., it provides a continuing organization for the coordination of the various needs of the industry and acts as a clearinghouse between the Dominion government and commercial horticulture generally. Twenty-five voting delegates meet once a year, with the majority of votes held by grower interest. The Canadian Association of Nurserymen has one vote.

Mr. Burns reviewed some of the activities of the association during



Officers, directors and committee chairmen of the Canadian Association of Nurserymen: (Seated, left to right) T. A. Torgeson, Estevan, Sask.; Spencer McConnell, Port Burwell, Ont.; H. Endean, Richmond Hill, Ont.; J. V. Stensson, Toronto, Ont.; A. B. Luke, Hudson, Que.; W. B. Wellington, Toronto, Ont. (Standing, left to right) J. R. Burns, Ottawa, Ont.; Len Cullen, York Mills, Ont.; J. McDonald, Lacombe, Alta.; William Haist, Toronto, Ont.; Fergus Brady, Strathroy, Ont.; J. E. Shuttleworth, London, Ont.; K. F. Stensson, Toronto, Ont.; S. C. Wellington, Toronto, Ont.; N. J. Scott, Bowmanville, Ont.; Donald McConnell, Port Burwell, Ont.; Arthur Fitzsimmons, Hamilton, Ont.



Canadian A. A. N. convention executive committee: (Seated, left to right) Mrs. Harry Endean, Harry Endean, J. V. Stensson; (standing, left to right) Spencer McConnell, K. F. Stensson, R. P. White.

the past year, including the advertising and publicity, insurance program, cooperative buying and the seventh annual short course held last August. He made a recommendation

[Continued on page 46]

A. A. N. CONVENTION PLANS

Prior to the 32nd annual convention of the Canadian Association of Nurserymen, at Niagara Falls, Ont., the convention committee of the American Association of Nurserymen met to formulate plans for the forthcoming national convention at Toronto, Ont., July 10 to 14.

A. A. N. Executive Secretary Richard P. White, Washington, D. C., reported that 470 persons had already registered for the convention, 190 of them being women and 45 children. Dr. White confidently predicted that the 1,000 mark would be reached by July. Approximately 150 rooms remain unreserved in the Royal York, the headquarters hotel, he announced, while only 12 of the 50 exhibit booths are not taken.

Attending the meeting January 19 at the Sheraton-Brock hotel were the following officers: Harry Endean, Endean Nurseries, Ltd., Richmond Hill, Ont., and Spencer McConnell, McConnell Nursery Co., Port Burwell, Ont., cochairmen; J. V. Stensson, Sheridan Nurseries, Ltd., Toronto, Ont., vice-chairman; Frank Fidler, H. C. Downham Nursery Co., Strathroy, Ont., treasurer.

Committee chairmen attending were Mrs. Harry Endean, ladies' entertainment; K. F. Stensson, Sheri-

dan Nurseries, Ltd., Toronto, Ont., registration; Walter Bowley, H. C. Downham Nursery Co., Abbotsford, Que., juniors' entertainment; William Haist, Stone & Wellington, Ltd., Toronto, Ont., entertainment; W. B. Wellington, Stone & Wellington, Ltd., exhibits; Len Cullen, Weale & Cullen, York Mills, Ont., transportation, and C. M. Barron, Barron's, Fonthill, Ont., decorations.

One of the main convention activities planned for July 12 will be a series of eight round-table discussions scheduled in separate rooms. Lloyd Platt, Platt's Landscape Nursery, Davenport, Ia., secretary of the National Landscape Nursery-

men's Association, and Dr. White will conduct this phase of the convention program.

Entertainment will play an important part in the scheduled activities. Sunday evening, July 10, a concert is planned at the Royal York hotel; Monday evening, July 11, a cocktail party, buffet dinner and dancing are scheduled at the Brant Inn, Burlington, Ont.; Tuesday evening, the Canadian Association of Nurserymen will serve as host at a special Canadian night; convention activities will be concluded with the annual banquet on Wednesday night.

Ladies attending the convention will find a full schedule of activities, starting with a reception tea on the roof garden of the hotel, Sunday afternoon, July 10. The annual meeting of the ladies' auxiliary of the A. A. N. will be held at the Guild of All Arts, a famous Toronto spot, where jewelry, chinaware and other Canadian products are made. Wednesday the ladies will have breakfast at Eaton's department store, after which they will listen to a talk on Irish linens and chinaware.

Children will be well entertained with a 2-hour program of get-acquainted games and vaudeville acts on Sunday afternoon, July 10. Monday morning the youngsters will have their own movie show, including two hours of nature, comedy and travel tour films. The next morning the younger set will go on a tour, visiting Casa Loma, an old Canadian castle. That afternoon a visit will be made to the de Havilland aircraft factory to see the jet airplanes. Wednesday morning the children will have a picnic lunch at Sunnyside pool.



Presentation of gavels to past and honorary presidents of the Canadian Association of Nurserymen: J. A. Aitken, Maj. John Cannon, J. V. Stensson, Spencer McConnell, T. A. Torgeson.

Tennessee Celebrates 50th Anniversary

The convention committees and officers of the Tennessee State Nurserymen's Association went all out to make their golden anniversary meeting one that will long be remembered. To commemorate the 50 years of service to the nursery industry, the 3-day convention was climaxed by planting and presenting a 20-foot magnolia tree to the governor of Tennessee.

Held at the Andrew Jackson hotel, Nashville, January 30 to February 1, the gathering attracted nearly 150 nurserymen and their wives from Tennessee and surrounding states. Highlight of the meeting was a series of round-table discussions on garden store selling, propagation, fertilization and irrigation. A talk on advertising also stimulated much interest.

Elected to office were the following: President, Archie Cultra, Morning Star Nursery, Rives; vice-president, Tom Faulkner, Faulkner's Mountain View Nursery, Maryville, and secretary-treasurer, Clark Boyd, Boyd Nursery Co., McMinnville.

Chosen for the executive committee were the following: L. C. Fletcher, Tennessee Nursery Co., Cleveland; Buck Allison, Highland Rim Nursery, White Bluff, and Leon Hawkersmith, Riverside Nursery, Winchester.

Opening the convention was an elaborate social hour on Sunday evening, with nurserymen from De Kalb, Warren and Franklin counties serving as hosts. Adding to the merriment of the evening, Ronald Hickerson, Ewing & Hickerson Nursery, Nashville, was dressed as a red-whiskered hillbilly complete with a jug of corn liquor.

An added feature for the anniversary celebration was the garden plot arranged in the main lobby of the hotel. Included were over 100 balled and burlapped evergreens and pots of blooming azaleas and daffodils. Garden statuary and wrought-iron tables and chairs completed the setting.

Business Meeting

President Hubert Nicholson, Commercial Nursery Co., Decherd, called the convention to order on the morning of January 31. An invocation was given by T. N. Nicholson, Sr., after which the secretary-treasurer, Tom Faulkner, conducted a roll call of members. In his report, Mr. Faulkner stated that the treasury showed \$2,677 before the convention. The membership roster included 75

active members, 21 associate and 10 affiliate members.

In a short address the president announced that the Nashville Tennessean, the morning daily paper, would publish a story about the history of the Tennessee nursery industry, including information on the "Plant Tennessee" program, in the Sunday supplement on February 27. Mr. Nicholson reviewed the meeting called by the Tennessee farm bureau in which the association was permitted to voice its opinions on how the University of Tennessee could better serve the nursery industry in the

TENNESSEE PRESIDENT



Presiding at the 50th anniversary meeting of the Tennessee Nurserymen's Association, Hubert Nicholson is the fourth of his family to serve as president, the others being his father, T. N. Nicholson, Sr.; his uncle, Harry Nicholson, and his brother, T. N. Nicholson, Jr. He was born at Decherd, where his father has been in the nursery business about 60 years, 53 in partnership with his brother, Harry, whose interest at his death was purchased by Hubert. Hubert worked in the nursery from the time he was 6 years old, with the exception of four years majoring in horticulture at the University of Tennessee, four and one-half years service in World War II, in the China-Burma-India theater, and one and one-half years in Korea as major, assistant G-3, 45th Infantry division. In the intervals between college and his terms of military service he worked for other southern nurseries, becoming his father's partner in November, 1952, upon completion of his second release from service. Their firm, the Commercial Nursery Co., primarily produces fruit trees, but also grows ornamental trees, shrubs and evergreens, operating on 290 acres. Some farming is done, and a herd of black Angus cattle is the pride of the senior Nicholson, who is almost 80 years of age and still puts in six days' work a week.

state. He related that much progress had been made in recent months toward inaugurating the "Plant Tennessee" program. A meeting was held with the governor, who gave his stamp of approval to the idea, and in the next few months an invitational meeting with all interested groups will be held. The governor, he said, is looking for a program outline.

At a final business session on Tuesday morning, a motion was passed that the officers of the association combine to form a committee to push the "Plant Tennessee" program. It was also decided at that time to leave the selection of next year's convention site to the executive committee. Ten new members were admitted to the association.

Advertising Problems

"What a Good Advertising Program Can Do for You Nurserymen" was the title of a talk delivered by Charles Coggins, Coggins Advertising Agency, Nashville. Nurserymen have a product of which they can be proud, he affirmed. People inherently like trees and shrubs, for last year over 2,500,000 people visited the Smoky Mountain national park, viewing the 150 species of trees and 1,500 varieties of flowers. Trees and shrubs offer beauty, peace and quiet. People want these materials, but have to be sold on them.

There is no magic formula for advertising, he said, for each group has different problems. The retail nurseryman, wholesaler, landscape contractor or any other member of the industry each has separate problems.

If a joint advertising program is to be considered, the first problem is fund raising and that is most difficult. The usual pattern is that out of 100 members of an association 10 or 15 carry the financial burden, 15 or 20 more contribute a small amount and usually are most critical of the program. To make all members interested, the campaign would have to be state-wide.

In Tennessee, he said, there are 158 newspapers, 128 weeklies and 30 dailies. The combined rate of all papers for a 1-inch advertisement would be \$130.59. For 52 times the cost would be \$6,791. Also in Tennessee there are 68 radio stations, 46 night and 22 daily. A 15-minute program on all of the night stations would cost \$1,847, and if a program was used each week of the year the cost would be \$96,049.

[Continued on page 74]

Ohio Short Course

Arborists' Day Opens Twenty-Sixth Annual Event



H. L. Jacobs and J. Melvin Easterday at Ohio State.

By P. A. Barker

The 26th annual short course for arborists, landscape gardeners and nurserymen, held January 17 to 19 at the Neil House at Columbus, Ohio, was attended by more than 300 persons from 17 different states. Sponsored jointly by the department of horticulture of Ohio State University, the Ohio chapter of the National Shade Tree Conference and the Ohio Nurserymen's Association, the short course was opened by a welcome from Dr. L. C. Chadwick, head of the division of floriculture and ornamental horticulture, Ohio State University.

Arborists' Use of Herbicides

Chemistry in arboriculture was discussed extensively during the arborists' day program, January 17. The first topic of the morning was "The Use of Herbicides by the Arborist." J. Melvin Easterday, landscape contractor, Canton, Ohio, talked on the "Control of Lawn Weeds," and Homer L. Jacobs, Davey Tree Expert Co., Kent, Ohio, on "Brush Control."

Mr. Easterday pointed out that the application of herbicides had increased rapidly in the last 10 years and consequently the use of spray equipment is no longer just seasonal. He cautioned that the operator of any spray equipment should be absolutely familiar with all the characteristics of the herbicide which he is using; namely, its potency and volatility; its effect on weeds that are to

be killed, other vegetation, soil, paint on buildings, and spray equipment. The operator should also know the most effective rate of application of the herbicide, its compatibility with other horticultural chemicals and also the best time of the year to apply the herbicide. Before putting any new herbicide into use, trial applications are particularly essential. An instance was described in which a sprayer, filled with 2,4-D herbicide spray solution, was parked within a few feet of a dogwood tree while the spray crew was eating lunch. Within six weeks the tree had died from the effects of the 2,4-D vapors that had been given off from the spray solution.

For applying 2,4-D and other horticultural chemicals to lawn and inaccessible areas, Mr. Easterday stat-

ed that he had found that a 25 to 50-gallon hydraulic sprayer was most satisfactory. Its small cost and ease of handling make it ideal for a great variety of jobs. In addition to being used for applying herbicides, it may also be used for spraying liquid fertilizers or insecticides to lawn areas either separately or as mixtures of any of these three materials.

The speaker suggested that, as a general weed killer, 2,4-D can be applied any time during the growing season, since there are many weeds that can be killed at any time. Of the difficult-to-kill weeds, knotweed should be sprayed in May or June, while dandelions seem to be killed best by spraying them in September or October. Normally adequate control can be obtained where the herbi-

[Continued on page 121.]



Vincent K. Bailey, Laddie J. Mitiska and Lewis Lipp in propagation round table, on Nurserymen's Day, at Ohio State University.

Other Short Course Reports:
OHIO NURSERYMEN'S DAY
Page 100
OHIO LANDSCAPE DAY
Page 112



Officers and executive committee members of Ohio Nurserymen's Association (left to right): David Metzger, Harley Bratton, James Siebenthaler, George Gens, Howard Kyle, Zaphar P. Warner and Laddie J. Mitiska.

O. N. A. Hears Talks on Varied Topics

By Kenneth W. Reisch

Over 200 persons attended the 48th annual convention of the Ohio Nurserymen's Association, January 20 and 21, at the Neil House, Columbus. The meetings, along with the 23rd annual "Ye Olde Tyme Dinner," proved to be a great success.

Officers elected for 1955 were: President, Howard Kyle, Spring Hill Nurseries, Tipp City; vice-president, James Siebenthaler, Siebenthaler Co., Dayton, and Roger Aukeman, Hollandia Gardens, South Vienna, secretary-treasurer. Elected to the executive committee for two years were Zophar P. Warner, Warner Nursery, Willoughby; Laddie J. Mitiska, Amherst, and Harley G. Bratton, Slemmons Gardens, Columbus.

An enjoyable gathering of old and new friends took place at the hospitality party held Wednesday evening. The film, "Rosarama," which included scenes from the Columbus park of roses, was a highlight of the evening.

Thursday morning, January 20, President George F. Gens, North Ridge Nursery, Norwalk, called the convention to order and introduced G. Brett Slemmons, Slemmons Gardens, Worthington. Mr. Slemmons gave a message in memoriam for J. Howard Burton, Hilltop Nurseries, Casstown, a past president of the association, and Mrs. P. C. Vandervoort, Wilmington, wife of one of the founders of the association.

The first speaker of the morning, Prof. Earl A. McIntyre, department of journalism, Michigan State College, discussed the subject of advertising for the nursery business.

Professor McIntyre stressed the fact that the nursery industry must advertise in order to progress. Advertising should be considered as one of the tools of merchandising and, instead of an expense, should be looked on as an investment. He said the only type of effective advertising is consistent advertising, which builds business by repetition. In conjunction with this consistent advertising the nurseryman must have the right merchandise, at the right time, in the right place and at the right price. This can be achieved by use of a unit control system, which consists of sales records indicating when, how many and at what price units are sold and which will indicate peak periods, etc.

Advertising should not be a hit-and-miss proposition, but should be well planned, with the costs based on a definite percentage of the annual gross sales. Professor McIntyre indicated that the advertising costs range from 1 to 4.5 per cent. The higher percentage would be used in an area of greater competition. The plan should be set up on a monthly or yearly basis, with greater stress placed on the peak periods.

As times change, so change people's buying habits. Because of this,

a nurseryman should conduct research in his neighborhood and among his customers. Professor McIntyre noted that results of research have indicated that there is more money to spend, there are more people over 65 with money to spend, there are more married women buying today with the average age of 38 and women are more factual and logical in their buying than men. It is up to the nurseryman, through effective advertising, to convince buying sources such as these of the value of his products and services. Consumer education concerning plants, landscaping and other services should also be carried on by the nurseryman.

Professor McIntyre pointed out that effective advertising was just one of the steps in effective merchandising and that a man must be a good salesman to obtain full value from his advertising. Displays should be used to fullest advantage and should sell an idea, not a product, such as using combined displays of plants, specific pesticides and fertilizers, and any other items closely related to the plants. The importance of color in displays was stressed and illustrations were given which showed that psychologically color can irritate, soothe, cool, warm, attract or repel a customer. Effective use of irritating colors in a cafeteria created the desired rapid turnover

[Continued on page 36]

Indiana Arborists Meet

By Robert C. Simpson and Donald Schuder

The annual 2-day meeting of the Indiana Arborists Association opened at Lafayette, January 20. Dr. N. K. Ellis, department of horticulture, welcomed the members to Purdue University. Donald Schuder, Indiana experiment station, gave an illustrated talk on the insect problems of the nurserymen and arborists.

Dr. J. C. Carter, Illinois Natural History Survey, Urbana, Ill., discussed the six worst disease problems of the arborists in Indiana. He eliminated Dutch elm disease, phloem necrosis and oak wilt, since these are fatal diseases with no cure. He made three groupings: (1) Vascular, wet wood bacteria and verticillium wilt; (2) stem blight and cytospora canker; (3) leaf, anthracnose and scorch.

Elm Diseases

Elm diseases and chemotherapy were discussed by Dr. R. W. Swingle, pathologist, U. S. D. A., Worthington, O. Confining his remarks to Dutch elm disease and phloem necrosis, Dr. Swingle said a high degree of disease control has been obtained when spray recommendations have been carefully followed. Careful timing and thorough coverage are essential. Additional problems have arisen, however, following continued applications of DDT. A buildup of mites and aphids is to be expected, requiring additional sprays or modified formulations. Heavy buildup of scale populations may also follow on

sprayed trees or in adjoining areas.

For Dutch elm disease alone the prefoliar spray is of most importance and should be made before appearance of the elm foliage or flowers, with thorough coverage of all bark and twig surfaces. Dendrol 4 per cent with 2 per cent DDT for hydraulic sprayers, or 12 per cent Dendrol and 12 per cent DDT for mist blowers, was recommended.

For phloem necrosis and where mites are a problem, later foliar sprays in June and mid-August seem essential. Most reported failures in control he attributed to poor coverage or insufficient gallonage. An average 50-foot elm, with good spraying conditions, should receive two to three gallons of concentrate, or 20 to 30 gallons of spray from hydraulic equipment. The dormant or prefoliar spray may be difficult to apply properly in the windy weather prevalent in March and early April. Late fall or winter applications were recommended by Dr. Swingle.

Chemotherapy is the use of chemicals to be introduced into the plant system for distribution throughout the plant. This field, said Dr. Swingle, is a promising one in this and other countries. There have been advances from the experimental point of view, but at the present none has proved of practical value for control of the elm diseases.

A more immediately promising approach, according to Dr. Swingle,

has been the breeding and selection of seedlings for resistance to both Dutch elm disease and phloem necrosis. Until recently work has been confined largely to the vase-shaped American elms. High resistance to each of these diseases has been secured, but not to both diseases. Other species, however, offer great promise. The Christine Buisman elm, a European selection of *Ulmus carpinifolia*, is highly resistant to both diseases, and a limited supply is now available from commercial nurseries. This selection is not hardy in parts of northern Iowa and Minnesota and is a favorite of the elm leaf beetle. It should be used only in diversified plantings. Selected seedlings of *Ulmus scrotina* vegeta show promise. In addition, approximately 75,000 seedlings are now on trial, including *Ulmus pumila*, *U. carpinifolia*, *U. glabra*, *U. laevis* and *U. japonica*. From these should come some valuable material.

Panel on Tree Insects

During the panel on tree insects and diseases the following points were brought out. There has been little evidence of build-up of resistance to DDT sprays in the case of elm bark beetles. Many cases of reported ineffectiveness of sprays for prevention of Dutch elm disease have been due to insufficient build-up of spray residue on the twigs and bark. A properly applied spray has a long residual effect.

Some of the new systemic treatments are proving very effective against aphids and mites.

The Augustine ascending elm has been tested and found susceptible to Dutch elm disease.

Recently newspapers have reported amazing results from use of salt for treatment of trees infected with Dutch elm disease and oak wilt. Scientific tests are being set up to prove or disprove these claims.

To prevent spread of elm diseases through natural root grafts, trenching has been effective. Such trenches should be at least 18 inches deep, preferably nearer the tree to be protected. Most elm roots are in the top 18 inches of the soil.

Oak wilt has been spread experimentally by use of squirrels and by blowing across the wilt mats onto wounded healthy tissue. It has also been spread by insects feeding on the

[Continued on page 68]



Staff members of Purdue University and speakers at Indiana Nurserymen's Association convention: (Seated) Prof. Roy Hull, Dr. Donald P. Watson, Dr. Kent Ellis. (Standing) P. T. Ulman, H. W. Gilbert, Dr. W. K. Leslie.

Indiana Association Meets at Purdue

By Robert C. Simpson

Officers elected by the Indiana Association of Nurserymen for 1955 are: President, Troy Bunch, J. C. Bunch & Son Nurseries, Terre Haute; vice-president, Henry Schnitzius, New Augusta Nursery, New Augusta. New executive committee members for a 3-year term are Floyd Bass, Jr., Bass Nursery, New Augusta, and Argel Pion, Pion Landscape Co., Fort Wayne.

Selection of Donald L. Schuder, entomology department, Indiana agricultural experiment station, as the executive secretary for the association was announced. Mr. Schuder will assume duties of the former corresponding and recording secretaries as well as edit the Indiana Nursery News, effective sometime in March.

Opening Session

Opening the annual winter conference of the Indiana association, at Purdue University, January 18, Prof. N. K. Ellis, head of the horticulture department, gave a welcoming address and outlined plans of his department of interest to nurserymen. Just outside the meeting place was the beginning of a large building to be the Union-Music Hall Annex. Here will be adequate facilities for several concurrent conferences, with ample exhibition space for even heavy equipment. Dr. Ellis explained that this tremendous building is for adult education or for what he preferred to call "continuing education." It is being built without expense to the taxpayers of Indiana and is a bonded project which will be self-liquidating.

Dr. Ellis stated that he had received a request from Dr. Donald P. Watson, of Michigan State College, to meet with other representatives of the eleven states in the north-central region (Ohio to the Dakotas) to consider a project on marketing ornamental horticultural crops. Dr. Ellis asked that a committee representative of the nurserymen advise him before close of the conference of any problem which he should take before the conference, one that would concern all eleven states.

The nurserymen were invited to inspect the plastic greenhouse being constructed by the horticultural department for study of problems in operation of this type of structure, which makes feasible the removal of the plastic cover during the summer. He asked for an expression of extent

of interest on the part of the nurserymen in this project.

Prof. J. A. McClintock traced the origin and development of the nursery industry from the time of the Garden of Eden.

Dr. J. P. Mahlstedt, Iowa State College, discussed the development of packaging nursery stock, including the various materials past and present. Polyethylene appears to be the answer to many problems arising from the need for reduced weight, particularly for the mail-order trade. Much of this work is still in the experimental stage, and revolutionary changes are expected within a short time. The talk was a summary of the work in this field to date.

Business Meeting

A preliminary business meeting was held in order to bring up questions for consideration and later decision. Among these was the question of a paid permanent executive secretary, combining the duties of three present offices.

A bill is coming up before the state legislature concerning much needed landscaping of the state capitol building at Indianapolis. Indiana nurserymen are opposed to expenditure of state funds for re-landscaping unless and until provision is made for

adequate and continuing maintenance by qualified persons or agency. Indiana has an impressive capitol building, but the present grounds add little of beauty.

The proper methods of differentiating between retail and contract sales were discussed, as a difference is involved of between one-half per cent and one-quarter per cent in state gross income tax for nurserymen doing planting and landscape work.

Representatives of exhibiting firms were introduced, and members were urged to visit the exhibition room. For the first time in many years requests exceeded available facilities.

An informal evening program included a talk on the psychology of advertising by a member of the university psychology department. A call for favorite colored slides brought good response and included scenes from the summer conference, landscape jobs and landscape materials.

Sales Analysis

Dr. Donald P. Watson, Michigan State College, opened the morning program, January 19, with an analysis of the nursery industry in Indiana compared with the national picture.

[Continued on page 66]



Officers and executive committee of Indiana Nurserymen's Association: (Seated) H. J. Schnitzius, New Augusta; Harold Bohling, Munster; Argel Pion, Fort Wayne. (Standing) Troy Bunch, Terre Haute; W. E. Cunningham, Waldron; Earl Moldenhauer, Huntington; Robert Simpson, Vincennes.

Hollies in the Southeast

By Charles A. Young, Jr.

The clubhouse of the Ida Cason Gardens, Chipley, Ga., was the site of the winter meeting of the Holly Society of America, January 14. From New York, New Jersey, Ohio, Maryland, Arkansas, Tennessee, South Carolina, Alabama and Georgia, 77 members and visitors gathered at the 2,500-acre gardens to hear four speakers, visit the plantings of holly and be conducted through the propagation greenhouse and lath house area.

In welcoming the guests, Mrs. Cason J. Callaway, cofounder and trustee of the Ida Cason Foundation, stated that the purpose of the gardens was to preserve the native Appalachian wild flowers and to inspire better living. C. R. Wolf, Millville, N. J., president of the Holly society, responded to Mrs. Callaway's remarks by stating that the society members were interested in the cultural aspects of all plant materials and pleased to hear that three holly trails were included in the gardens.

Landscape Use

Prof. Hubert B. Owens, head of the landscape architecture department, University of Georgia, addressed the meeting on "Holly in the Landscape." He stated that landscape architects in the southeastern region regard the genus *ilex* with esteem and affection because it is such a versatile genus. The wide range in sizes of holly from ground cover, through small, medium and tall trees, both evergreen and deciduous types, and the availability of red, blue, black and yellow-berried varieties were the basis for his designation.

A change from the nursery stock offered in the 1930's and 1940's to include a number of hollies was attributed in part to the freezing weather of November, 1950, in which hollies withstood the low temperatures experienced in Alabama and Georgia; the significant work of Dr. Harold H. Hume, and the educational work of the Holly Society of America.

In outlining the characteristics of objects and the principles of design in relation to the application of holly to landscape architecture, Professor Owens observed that contemporary architects were providing "freer plans" for residences. More thought is being given to orientation, integration with the site and locating the living quarters adjoining the private areas of the grounds. Planting materials, with an emphasis on those native species which are appropriate for specific landscape uses, are in demand. Gardens in the newer homes will be characterized by small arbors, small sculptures and pools and by the use of planting beds adjacent to paved areas. The Italian gardens offer the best lessons for design in the south. Professor Owens concluded his address with the showing of Kodachrome slides of historic and modern use of plant materials in Italy, Switzerland, Portugal and France.

Garden Development

Fred C. Galle, horticulturist for Ida Cason Gardens, described the developments which began in 1949. The gardens were opened to the public in 1951 with the opening of the woodlands to show the native wild flowers, shrubs and trees. Sepa-

rate trails for American holly, English holly and Oriental holly have been created. A magnolia arboretum, native azalea trail and a trail designed for bird watching are planned for 1955. A bathing lake with a 1/2-mile white sand beach and an 18-hole golf course are also featured at the gardens. His talk was accompanied by Kodachrome slides of native wild flowers growing in the gardens and the plant materials introduced for display.

His techniques and the planting materials employed in 12 flower arrangements utilizing holly were described by Prof. Henry Orr, Alabama Polytechnic Institute. Professor Orr encouraged the audience to use readily available materials to develop skill in flower arranging and then to seek out more classic materials and apply formal treatments. Arrangements made by Professor Orr in his demonstration are shown on the speakers' table in the accompanying illustration.

New Jersey Orchard

The management of the holly orchard of the New Jersey Silica Sand Co. was described by Daniel G. Fenton, Millville, N. J. Consisting of 2,800 trees, the orchard was begun in 1939 to supply the Christmas holly sprays for customers of the sand company. An overgrown farm was cleared of oak and pine saplings and the soil quality restored with applications of leaf mold and cow and chicken manure. An organic fertilizer is now used and the pH of the soil is stabilized at 6.0 to 6.2. Clean cultivation is practiced in the orchard.

A spraying program is in operation which uses DDT for the control of holly leaf miner, Aramite for the control of red spider, and a 2 per cent dormant oil for scale, applied during April before new growth develops. Spring frost damage is minimized by the use of air-circulating machines mounted on 30-foot towers at two locations in the 14-acre tract. Smudge pots and bonfires are used to supplement the machines during critical periods of weather. Full pollination is assured by the use of five hives of honeybees when the holly is in flower.

Wilding holly trees were used to establish the orchard and nursery-grown stock is being used to extend the planting, Mr. Fenton stated.

Growing in Southeast

The topic, "Growing English Holly in Southeastern States," was discussed by William C. Frierson,

[Continued on page 71]



Speakers at the Holly Society meeting at the Ida Cason Gardens, Chipley, Ga.: (Left to right) Daniel G. Fenton, Dr. William C. Frierson, Prof. Hubert Owens, Fred C. Galle, Prof. Henry Orr and C. R. Wolf.

Maryland Discusses Trade Problems

By George S. Langford

About 160 were on hand for the annual meeting of the Maryland Nurserymen's Association, held at the Emerson hotel, Baltimore, January 12 and 13. A good variety of speakers was heard, presenting much interesting and varied information.

The afternoon of January 12 was devoted to discussions on business problems and a social get-together. These discussions were followed by a talk by Dr. Lee J. Enright, University of Maryland, on research now being done at the university for the benefit of nurserymen. Dr. Enright outlined the opportunities for supporting fellowships at the university for furthering work in the interest of the nursery industry. It was the consensus of those present that the association should attempt to promote a fellowship, and it was agreed that the matter should be referred to the board of directors for further study.

Among the several problems discussed were methods used by certain chain stores in merchandising nursery stock. It was the feeling of the group that much of the stock offered for sale by certain chain or similar stores was good when delivered by the wholesaler, but because of the way it was handled much of it was often worthless by the time it reached the consumer. One suggested remedy that seemed to meet with general approval was that wholesalers should make more effort to instruct chain stores and similar establishments as to the best way of handling nursery stock. It was agreed that good survival in nursery stock, regardless of source, was advantageous and helpful for all associated with the industry.

Two other problems which received considerable discussion were cooperative advertising by the association for the benefit of its members and water supply during dry periods for nurseries operating in municipalities. Resolutions were approved authorizing the president to appoint committees to look into a public relations program that would be of benefit to association members; to consider cooperative advertising; to promote harmonious relations between the association and the various garden club groups. It was decided to draft resolutions that could be used in presenting facts to municipalities on the needs of nurserymen for water and at the same time study

the entire water conservation problem. It was suggested that the Maryland farm bureau be requested to aid the nurserymen in a study of water conservation.

Officers Elected

New officers elected include president, Edward L. Stock, Jr., Stock Bros., Inc., Bethesda; first vice-president, Carville G. Akehurst, Akehurst Nursery, Fullerton; second vice-president, Ernest L. Bartle, Hagerstown Nursery Co., Hagerstown; treasurer, C. Willard Stoner, Westminster Nurseries, Westminster; executive secretary, Paul S. Hofmann, Towson Nurseries, Tow-

son, and educational secretary, George S. Langford, department of entomology, University of Maryland, College Park, Md.

New members of the executive committee are John Grier, Forest Hill; Gilbert Gude, Rockville; Hollis J. Howe, Towson, and Paul Stadler, Silver Spring. Carry-over members are Elton L. Lynch, Lincoln, Del.; Robert S. Johnston, Easton; Paul E. Snyder, Frostburg, and Milo G. Coplen, Rockville.

Paul S. Hofmann was named as the association's representative to the farm bureau, and Dr. Ernest N. Cory and Dr. Lee J. Enright will serve as advisers from the University of Maryland.

Educational Meeting

The educational meeting was opened with a short address from President Carl Orndorff. He briefly outlined some of the opportunities open to the association for aiding and promoting the nursery industry. He also briefly reviewed the activities of the association during the past year, including the petitioning of the Department of Agriculture for the continuation of the federal Japanese beetle quarantine and the cooperation given the American Association of Nurserymen in opposing the amendment to plant quarantine 37, which would allow plants to be imported growing in certain packing media. Mr. Orndorff pointed out that the administration, inspection and policing necessary to enforce effectively such a regulation would be extremely costly and that there was uncertainty that fumigation at the port of entry would effectively destroy harmful bacteria and nematodes that might be in the balls of packing in which the plants were being grown.

Human Relations in Business

F. H. Spencer, United States Department of Agriculture, Washington, D. C., followed President Orndorff with a down-to-earth and inspirational talk on human relations in business. He listed, step by step, qualities essential to success in the area of human relations. Some of the qualities discussed included knowledge of human relations, imagination, responsibility, ability to delegate, decisiveness, dependability, integrity, unselfishness, loyalty, pa-



MARYLAND PRESIDENT

The new president of the Maryland Nurserymen's Association is Edward L. Stock, Jr., of Stock Bros., Inc., Bethesda, Md., which was started as a landscape maintenance business in 1933 and incorporated three years later under the present name. The firm operates 23 acres, growing nursery stock for landscape contracting.

Born at North Tonawanda, N. Y., in 1906, Mr. Stock moved to Washington, D. C., with his family a year later, and since 1914 he has resided in Montgomery county, Maryland. He graduated from St. Albans School for Boys in 1924 and from Cornell University five years later, with a B. S. degree in horticulture.

Besides having been vice-president of the Maryland Nurserymen's Association for eight years, Mr. Stock is vice-president of the Montgomery County Social Service League, treasurer of Bethesda-Chevy Chase Educational Foundation and past president of Rockville Pike Business Association and of the Bethesda-Chevy Chase Rotary Club.

Mr. Stock was married in 1934 and has four children. His wife graduated from Pennsylvania School of Horticulture for Women the past August.

tience, courage and faith—in one's self, in others, in the future and in God.

Dr. Paul E. Nystrom, head of the university's department of agricultural economics, followed Mr. Spencer with a discussion of the economic outlook for 1955. He pointed out most farm enterprises are in trouble and said "agriculture is suffering the adverse effects of the inflation-deflation period we recently have experienced. Farm income is off 25 per cent over the past three years. The cost-price squeeze is still on and is likely to continue."

Farm prices, he said, dropped 15 per cent during the past year, but the cost of producing farm commodities was off only 4 per cent. In contrasting agriculture with other businesses, he stated that "while farmers on the whole can expect little improvement in their economy, the national business outlook for the next 12 months is good." Because of this and the stability of employment, with resulting high consumer activity, it was his feeling that demand for nursery stock, particularly ornamentals, should remain high.

The last speaker during the morning was Dr. W. F. Jeffers, University of Maryland plant pathologist, who discussed the menace of *Phytophthora cinnamomi* to woody ornamentals. He said in Maryland this fungus appears to be an important factor in the death of boxwood and yew; however, he noted, it has been found on other plants including azalea, rhododendron and viburnum. *Phytophthora* root and crown rot, he said, is more common in poorly drained soil and in plants that have been set too deep in the soil. Yews

frequently die when grown in poorly drained, acid soil even though this fungus is not present. However, when present, the disease seems to be more severe. He advocated that nurserymen use every precaution to prevent contamination of cuttings, propagating beds, rows, lining-out stock, etc., and that in the final planting area well-drained soil be used.

The Banquet

At the luncheon banquet Henry Hohman, Kingsville, served as toastmaster. The highlight of the occasion was the awarding of the association's professional achievement certificate to Mr. Hohman. After a brief statement by Dr. Ernest N. Cory, Maryland's state entomologist, on Mr. Hohman's many accomplishments, the presentation was made by Paul S. Hofmann, Towson Nurseries. The principal speakers at the banquet were Dr. Thomas B. Symons, member of the University of Maryland board of regents, and Dr. Wilson H. Elkins, president of the university. Special guests included Dr. James M. Gwin, director of extension; Dr. I. C. Haut, director of the experiment station, and Dr. Nystrom, all of the University of Maryland.

Show Summer Movie

A popular item on the afternoon session was a movie taken and prepared by Patsy Donofrio, Carroll Gardens, Westminster, which covered activities at the 1954 summer meeting. Many of the nurserymen were able to observe themselves for the first time as star movie performers.



Review of the opening day of the first winter trade meet of the Southern Nurserymen's Association brings smiles of satisfaction to some of the members who planned and promoted the meet, (left to right) George Sawada, Hoskin Shadow, Gervin Pringle, Arthur Watson and Ollie Gresham.

The first talk of the afternoon was on the culture of camellias and other semihardy ornamentals on the eastern seaboard, by Dr. Francis deVos, United States National Arboretum, Washington, D. C. Dr. deVos reported that there were a number of

[Concluded on page 61.]

SOUTHERN ASSOCIATION

First Winter Trade Meet

As another one of its services to the membership and to the nursery industry, the Southern Nurserymen's Association held its first annual winter trade meet January 23 to 25 at Jacksonville, Fla. In spite of the blustery and chilled weather, very unusual in Florida, the response of the various nursery and allied groups was extremely gratifying, and the enthusiasm at the meet was warm and vigorous.

The trade meet officially opened Sunday afternoon, January 23. A get-acquainted buffet supper was enjoyed that evening, with the genial Senator Edwin Fraser as the master of ceremonies. Luncheons were held each of the following days and at both of these the inherent theme of the entire meet, i.e. "It's better to sell quality instead of price," was keynoted by the program. The film, "How to Sell Quality," by the Dartnell Corp., was shown through the courtesy of the Florida Nurserymen and Growers Association at one of the sessions and W. J. Hamerick, of the Gulf Life Insurance Co., gave a talk on "Selling" at the other.

A panel discussion on Container-grown Plants was held, with the following as panel members, J. H. Burton, Hyattsville, Md.; Edwin Fraser, Maccleenny, Fla., and Elwood Stephens, Semmes, Ala.

Directors' Meeting

The midwinter meeting of the board of directors of the Southern Nurserymen's Association was held at Jacksonville, Fla., January 22 and 23, at the Roosevelt hotel. President Hoskins Shadow presided.

Routine business was discussed, and plans were laid for the annual convention, to be held August 14 to 16, at Asheville, N. C. George Vanderbilt hotel will be convention headquarters.

The following board members were present: President, Hoskins Shadows; vice-president, George Sawada; secretary-treasurer, Ollie Gresham, and members Jack Aichele, Aubrey Owen and Arthur Watson.

G. S.

Selling, Chief Topic at Oklahoma City

By Betty H. Prim

The winter meeting of the Oklahoma State Nurserymen's Association, at Oklahoma City, January 19 and 20, was accounted one of the best yet held by this organization. Besides business sessions, there were instructive talks by experts on soils, advertising, salesmanship, landscaping and related topics.

Officers for 1955 elected at the final session are president, Alvin Dickerson, Jr., Tahlequah; vice-president, Gene Fleming, Oklahoma City, and secretary-treasurer, Harold Nickels, Muskogee.

Host city will be Tulsa for the winter meeting in 1956. The group voted to leave the decision of summer meetings to the discretion of the executive committee.

Serving on the executive committee are the following state nurserymen: Bruce Rey and Frank Sneed, Oklahoma City; Earl Nelson, Enid; Ted Tetrick, Pawhuska, and Mario Sanseverino, Tulsa.

Opening Session

President Earl Nelson opened the convention by presenting special guests and then gave his address. The work of nurserymen, he said, cannot be measured in terms of money, and he pointed with pride to the part nurserymen have played in beautifying parks, playgrounds, industrial developments and private homes.

After the secretary's report by Gene Fleming the group adjourned for luncheon.

Planning for Retail Profit

Speaking on the subject, "Planning for Retail Profit," Bill Biggs, of Wolfe Nursery, Stephenville, Tex., brought nurserymen a well-planned talk, that covered such factors as good advertising, promotion, proper displays and good salesmanship.

Mr. Biggs said emphasis must be placed on selling creatively rather than on pricing merchandise. It is doubly important, he pointed out, to include enough margin when pricing the merchandise to allow for selling creatively.

"The customer does not buy because of the price. You have to create a desire for the merchandise in his mind before he will buy," he said. "It is important to prime the pump. First, develop a simple outline of what you want to do. Make

a statement of the results expected. Get reliable information. Tell your employees of your plan.

"You must make the man with a dollar feel the need of the product you have," he said. "Create in the potential customer the desire to own what you have to sell. This is one of the basic requirements of selling."

Some of the desirable features of a good salesyard he listed as: A good location where there is ample traffic. Adequate parking facilities. Display of merchandise so that it is easy for the customer to shop. Displays opening into the nursery proper.

Soil Conditioning

Dr. J. Q. Lind, agronomist of Oklahoma A. and M. College, Still-

water, discussed soil conditioning, beginning with the simple statement that soil structure is an arrangement of soil particles. He showed three types of Oklahoma soil which he had brought to the meeting. He suggested problems that these and other samples of soil might present and offered suggestions for proper treatment to produce better crops. Factors in a practical solution included these: Create a new structure by proper tillage. Stabilize the granules by humus—this is the only permanent stabilizer known and is the most effective.

He pointed out that the solution is not to add sand. Sand and tillage may temporarily improve the condition, but the procedure is not recommended. The same thing can be accomplished with tillage alone.

Dr. Lynd said the amount of humus in natural virgin soil depends on many factors. With tillage the amount decreases. It is then necessary to add organic materials, such as crop residue, manure or compost.

"If the grower is in a hurry and desires temporary results and does not mind the expense, commercial conditioners may be the answer," Dr. Lynd said.

Speaking of specific soil situations, such as salt accumulation in soil, he said this will require proper drainage and gypsum additions.

Dr. Lynd invited questions at the close of his talk, and much additional helpful information was given in the answers.

Merchandising

Howard Carraway, of Fort Worth, Tex., created tremendous enthusiasm at the Wednesday afternoon session with his talk on merchandising. He asserted that the primary objective of any business is profit and the surest route to profit in business is advertising. Advertising is the cheapest avenue to mass production, he said. The purpose behind each type of advertising is to make the customer want what is to be sold. "Any business needs a fixed policy of sales advertising," he said.

"Persuade people to want what you have to sell," he advised. And in this, salesmen are most important. He gave the definition of a salesman as "a person who helps other people want something."

"Life is made up," he said, "not

OKLAHOMA PRESIDENT



Alvin Dickerson, Jr., the new president of the Oklahoma State Nurserymen's Association, married into the nursery business nearly eight years ago. He was studying at Oklahoma A. & M. College to be an electrical engineer, but Ben Davis, his father-in-law, convinced him of the opportunities in the nursery field. So he gave up engineering to begin work with the Ozark Nursery Co., Tahlequah, Okla., where he was given a free hand in the management of sales. He reorganized from top to bottom, first the mail order end of the business, then the drive-in retail salesyard and finally the wholesale trade. The expansion in sales and profits that have resulted are proof of his ability in the field.

Besides being active in nurserymen's organizations, Mr. Dickerson is a member of Lions International, a director of the chamber of commerce and an officer in the junior chamber of commerce.

of things, but of people." He said the customer is not impressed with the price of a tree for his yard. He is thinking of the compliment his neighbor will pay him and how attractive the tree will make his place. He is not thinking of the price of the tree, no matter what price you put on it. He is thinking of the satisfaction he will get from owning it, and that is what sells the tree.

Mr. Carraway gave some valuable suggestions on the pricing of merchandise. He said problems arising in advertising need the help of an expert in order to get the most from advertising dollars.

Speaking of securing customers, he suggested contacting them by telephone, printed matter or door-to-door contact. He said a prospective customer who has only recently moved into the area would appreciate a call from a nurseryman who courteously introduced himself and offered his services. He suggested, too, a follow-up letter of thanks to customers. Business is there for all, he said, if nurserymen will only sharpen their sales efforts.

Landscape Design

Thomas Roberts, Oklahoma City landscape designer, offered some practical suggestions on landscape design and construction, using slides to illustrate his remarks. Some of the slides showed pictures of landscape work at different stages of construction, giving clear details of how it was done.

Mr. Roberts pointed out that a landscape design job must not only be ornamental and attractive, but it must also serve the client's needs. He said it is the landscape man's responsibility to aid the client in

selecting the lot and to see that the house is properly placed on the lot so that the house and the landscape design will be properly oriented for a pleasing effect. He must also talk with the residential architect so that all work is right for that particular house, such as windows being properly placed so that the beauty of the yard can be seen from within the house.

It must be remembered, too, that anything in view becomes part of the landscape. Plant material is not the only thing to be considered. The

[Continued on page 72]

MIAMI STAGES PLANT SHOW

Two years ago, when the Dade county chapter of the Florida Nurserymen's and Growers' Association held its first plant show, there were only 28 exhibitors and a total attendance of 7,000 people. Last year, 13,000 people came to see the second show, which had increased to 38 exhibits.

This year the nurserymen decided to go all out for a big show, giving everyone the opportunity to attend. The huge Dinner Key auditorium, Miami, where parking facilities were available for 2,500 cars, was engaged. Final attendance figures totaled 53,723, setting a record of more than four times last year's attendance.

The methods used to bring in this tremendous crowd were free parking, free admission, valuable prizes and an invitation for the public to bring their plant problems before a panel of experts who gave free information and advice. A week-end of perfect weather plus the above inducements drew the record turnout.

The visitors were well pleased with the 60 plant exhibits and the 85 displays by allied trades.

The doors were opened to the public at 2 p. m. Friday, January 7, and again from 10 a. m. until 10 p. m. on Saturday and Sunday.

Just prior to the official opening, there was a gathering of exhibitors, visiting dignitaries and members of the press, radio and TV. During this preview, refreshments were provided by Arvida Nursery, of South Miami.

The affair had received excellent advance publicity through local newspapers and radio and TV stations.

Friday evening, Jim Griffin, executive secretary of the Florida Nurserymen's and Growers' Association, showed color slides on landscaping and ornamental plants.

Saturday morning at 11 o'clock a question and answer clinic was conducted by Carl Bachman, president of the Dade county chapter. Mrs. Cleo Neel Elder gave a short talk on annuals. Mrs. Myrtle Armstrong, Kitchen Door Nursery, spoke on ornamentals. Raymond C. Hogshhead, of North Miami, spoke on foliage plants. Raymond Plumer, superintendent of Miami city parks, spoke on the beautification projects in his department. Oscar Nelson, Nelson's Nursery, answered questions which had been deposited in a box by members of the audience.

At 8:30 p. m. another series of educational lectures was presented. George G. Schoetzer spoke on the use of palms to the best advantage.

At another program at 2 p. m. Sunday, Dr. S. J. Lynch, University of Miami, and Dr. Bruce Ledin, University of Florida, spoke on fruit trees. Hugh Lalor spoke on the foliage plant industry, and State Senator Edwin Fraser, Southern States Nursery, on general stock. James Dunaway, Tropical Landscape Co., discussed the situation in which FHA financing allocates funds for landscaping and the money is not used for this purpose. He said that purchasers of new homes financed under FHA were being fleeced of millions of dollars in Florida because they were not getting the landscaping called for by specifications. A special exhibit showed homeowners samples of what is being done and what should be done.

Carl Bachman, president of the Dade county chapter of F. N. G. A., says plans are already being made for next year's show, with over half of the space sold this year having already been contracted for again next year.



Portion of the Plant Show at Dinner Key Auditorium, Miami, Fla.

Washington Winter Convention

By John B. Strander

In dispatch of business and in its educational program, the convention of the Washington State Nurserymen's Association, held January 17 and 18 at the Winthrop hotel, Tacoma, was regarded as the most memorable in the association's history.

President W. M. Steward, Maple Valley, began the first session by calling attention to the work of the convention committee. Mrs. Helen Firth, Firth Nursery, Tacoma, was chairman. Frances Kinne Roberson, L. N. Roberson Nursery, Seattle, created the actual program. Angelo Balzarini, Five Corners Nursery, Seattle, was in charge of the commercial displays, staged by almost 50 firms. The committee was assisted by Henrietta Balzarini, Esther Balzarini and John Eichelser.

One of the highlights was the awarding of an honorary life membership to Brian O. Mulligan, director of the University of Washington Arboretum, Seattle. Mr. Mulligan has always exerted himself to be kind and helpful to any member of the trade who has come seeking information. At the banquet, presentation was made of a large silver tray and coffee maker to John B. Strander for his efforts in promoting the Pacific northwest nursery industry.

At the opening session greetings were presented by Mrs. William Goering, a member of the Tacoma city council and an amateur gardener.

A business meeting completed the

morning and was followed by a group luncheon in the Crystal ballroom of the hotel. John B. Strander was appointed chairman of a committee to investigate the possibility of obtaining market research in ornamental horticulture. Other members of the committee are Ben Seike, Des Moines Way Nursery, Seattle; Harry Post, Auburn Taxus Nursery, Auburn; Bryan Taylor, Taylor Nurseries, Seattle, and Howard Lynn, Lynn Gardens, Tacoma.

The afternoon session was opened by a talk on population by Ted Brown, Brown's Nursery, Ephrata. Mr. Brown is an expert on population movements within the new Columbia basin irrigation project. The state of Washington is on the verge of becoming one of the nation's most important regions economically, he said.

The banquet, planned by Esther Balzarini, was held January 17. Dr. D. F. Allmendinger, director of the western Washington experiment station, led the group in singing. An inspiring message was delivered by Roderic Olzendam, founder and director of the "Live and Let Live" Association, a group working for highway traffic accident reduction. Then the Eagle's Broadway & 42nd Street Revue provided a display of precision dancing and singing. Henrietta Balzarini arranged for the appearance of this group of TV and recording artists.

The second day opened with the appearance of a number of nursery-

men on the Burt McMurtrie show over radio station KTAC. "Breakfast with McMurtrie" originates in the Winthrop hotel and commands a wide following throughout the Puget sound region.

The morning meeting began with more singing, led by Prof. Willard Summers, of Washington State College, and W. M. Steward.

Then the nurserymen divided into round-table groups to discuss current problems. After one hour the groups were broken up. After a few moments of relaxation, they convened again, with the leaders talking again about the same subjects. The repeat enabled the members to take part in two areas of interest. Subjects and leaders were:

Propagating: Bob Moller, State Flower Nursery, Bothell, and Jack Spaargaren, Hollandia Gardens, Seattle.

Landscaping: John B. Strander, Strander Nurseries, Seattle, and Harley Mays, Mays Landscape Nursery, Vancouver.

Merchandising: John Snyder, C. & O. Nursery, Wenatchee, and John Eichelser, Melrose Seed & Nursery, Tacoma.

Land utilization: Stanley Walters, Walters Nursery, Puyallup, and Harold Wells, Wells Nursery, Mount Vernon.

The afternoon began with a business meeting of the Washington chapter of the American Association of Nurserymen, of which Stanley Walters, Walters Nursery, Puyallup,



Officers of Washington association and A. A. N. chapter (left to right): John Snyder, Victor Mix, Harley Mays, Lenora G. Walters, W. M. Steward, Larry Krause, Stanley Walters, Harold Hopkins and John B. Strander.

is president, and Lenora G. Walters, secretary-treasurer. An election resulted in Leonard H. McGuire's becoming the delegate of the chapter to the next A. A. N. convention. John Snyder, C. & O. Nursery, Wenatchee, who is chairman of a committee to plan entertainment for a stopover of A. A. N. convention visitors in Seattle in 1956, reported on arrangements.

At the concluding session of the state association meeting, Harold Hopkins' earlier proposal on a uni-

form guarantee was unanimously accepted. Larry Krause, Krause Nursery, Spokane, and Clarence Malmo, Malmo Nurseries, Seattle, were appointed to revise and streamline the association's constitution and to investigate the possibility of incorporation. A committee on fair trade practices was appointed, as follows: Leonard H. McGuire, chairman; Harold Hopkins, Hopkins Nursery, Bothell; Bob Tindall, R. E. Tindall Nursery, Bothell; John B. Strander, and Harley Mays.

Western New York Group Reviews State Problems

By William E. Snyder

At the annual winter meeting of the Western New York Nurserymen's Association, held January 21, at the Hotel Sheraton, Rochester, Al Synesael, Jackson & Perkins Co., Newark, welcomed one of the largest groups to attend this meeting in recent years, over 125 persons. William Kelly, Kelly Bros. Nurseries, Inc., Dansville, presented the report of the secretary and treasurer. Activities of the association during the previous year were described, and it was reported that the association continues to have a steady increase in membership.

The association has been invited to prepare an exhibit for the 1956 annual meeting of the New York Horticultural Society. John Kelly, Kelly Bros. Nurseries, Inc., was appointed chairman of the committee to make the necessary arrangements.

Bernard B. Stangler, Land-O-Trees Landscape Service, Buffalo, who is secretary of the New York State Nurserymen's Association, described some of the activities of the state organization. He mentioned the research grant to Cornell University, the 4-H Club landscape prizes and the publication of the New York Nursery Notes.

The officers elected at the meeting are: President, Bernard B. Stangler, Land-O-Trees Landscape Service, Buffalo; first vice-president, William Boocock, Four Winds Farm Nursery, Buffalo; second vice-president, Dan Quigley, Maxwell, Bowden & Rice Nursery, Geneva; secretary-treasurer, William Kelly, Kelly Bros. Nurseries, Inc., Dansville.

Directors for the New York State Nurserymen's Association are Ed Monin, Sheridan Drive Nursery, and Robert Auld, Auld's Garden Shop, both of Buffalo. Alternate directors

are E. B. Stedman, Stedman's Nursery, Newfane, and Dick Roberts, Roberts Nursery, Dansville.

The morning session was highlighted by a talk by Dr. Richard P. White, executive secretary of the American Association of Nurserymen, whose topic was "Washington Reporting." The two main parts of his remarks concerned the significant portions of the President's messages to the Congress which affect the nursery industry and the position of the Washington office of the A. A. N. in relation to the nurseryman. According to Dr. White, it is doubtful if there will be any reduction of excise or corporation taxes this year. A change in the minimum hourly wage will affect nurserymen through possible increased competition for workers. The proposed federal-state highway program and the new federal-state school program will be of considerable interest to the industry. Changes in some postal rates may be made to compensate for the proposed pay increases for governmental workers.

The A. A. N. group insurance provisions are better this year than last year, according to Dr. White, and a comparison of the A. A. N. policy with private policies was invited. The industrial beautification program, now in its second year, was an instantaneous success. His remarks were concluded with a short discussion of the annual convention to be held at Toronto, July 10 to 14.

After luncheon, Joseph E. Myler, secretary-treasurer of Neisner's Stores, talked on the subject, "What I Foresee in the Future." Mr. Myler stated that 1955 had prospects of becoming the second best business year in our history. He also stated that the rapidly expanding popula-

tion should account for continued good business conditions through 1960, and he struck an optimistic look for the future beyond 1960.

Prof. Frank A. Pearson, of the department of agricultural economics, Cornell University, told the nurserymen that they could do their own forecasting about business by asking the local car dealers, clothing merchants and building contractors, "How's business?" According to Mr. Pearson, 85 per cent of American business is accounted for by food, clothing, building and automobiles. Over the years food remains relatively constant, but the other three items fluctuate in cycles, clothing in 2-year cycles, automobiles in cycles of three to four years and building in cycles of 18 to 20 years. He explained that the longer the cycle the more violent the fluctuation. Although Mr. Pearson believes that 1955 will be another good year, he warned of the time when there would be closets full of clothes, cars in all garages and the appearance of numerous "For rent" and "For sale" signs on American homes and buildings. Such a condition will spell trouble, he warned.

A discussion of the maintenance of virus-free bud stock for stone fruits was given by Karl Brase, of the Geneva experiment station. He described the methods in use at the experiment station for the annual indexing of cherry bud stock for yellows and leaf ring spot. Maintenance of an isolation block for bud stock was recommended. He said that virus-free budwood can be obtained from the station to establish such blocks and that the bud stock should be isolated from all other stone fruits, for example, by placing in an apple planting. Budwood can

[Concluded on page 58]



A. L. Synesael

P. O. Approves Polyethylene Wraps

While amendment of the postal laws and regulations has not been made, the general approval of parcel-post shipments of nursery stock packaged in polyethylene-coated kraft paper and polyethylene film has been received from the Post Office Department by the Washington office of the American Association of Nurserymen.

Last year individual mail-order nursery firms received letters of permit from the Post Office Department to ship in such packages, test mailings of which were made to the satisfaction of the mail officials. This year packages as described below can be made without individual firms' securing permits.

The ruling results from recent correspondence between R. P. White, A. A. N. executive secretary, and N. R. Abrams, Assistant Postmaster General.

Support of the ruling resulted from the test mailings made last season to Dr. White and the post office at Washington, D. C., by mail-order nursery firms. The experience of such firms in the use of polyethylene wraps has followed experiments of Iowa nurserymen and members of the staff at Iowa State College, which have been reported in several articles in the American Nurseryman.

Important evidence of the success of the new wraps was presented in a statement of its past year's experience by the Henry Field Seed & Nursery Co., whose vice-president, George Rose, has been prominent in this pioneering effort. His statement of the remarkable results follows:

"During the year ended August 31, 1954, nearly 400,000 nursery shipments were made by this company in polyethylene film and polyethylene-coated kraft paper.

"The shipments of deciduous material were made in polyethylene-coated kraft paper identical to the samples sent to the Post Office Department some time ago. No packing of any sort was used in these packages, and no moisture was added, as we find that any added moisture tends to cause mold and rotting.

"The perennials and strawberry shipments were made up with most of the plants of perennials being individually wrapped in polyethylene film or dropped in polyethylene sacks. Strawberries were dropped 25 plants per bundle into a polyethylene sack, and then the plants

contained in an order were either wrapped in a sheet of 60-pound kraft or placed in a shipping carton.

"In the house plant department, individual potted plants were placed in paper shipping pots and then dropped into polyethylene sacks. They then were packed into a specially designed carton, such as the triangular carton and other types which have been engineered for superior strength and all of which have been submitted to the Post Office Department for testing in the past months.

"In the shipping of the above three types of plants, no moist packing of any sort was used, and in each shipment a notice was inserted advising the customer about the new method of shipping and of the three years of experimentation by Iowa State College and many nurseries in Iowa that led to the perfecting of this new method.

"We have received many letters of commendation from our customers on the condition of the plants when they reached their destination and very few letters of complaint. These letters of complaint mostly

were from people who did not read the notice in the package regarding the new type of packing and who felt sure that some one in the nursery had forgotten to add the damp packing material. When an explanation was sent to these people who complained, we often received a letter back advising us that they just had not realized what we were trying to do and that actually the plants had arrived in fine condition.

"Our service department in its annual report covering the year ending August 31, 1954, has offered some startling figures which seem to indicate that the type of packing adopted by our firm for the past year has had far better results than we had dared hope. From the report of our service department, we offer the following data:

"In the year ending August 31, 1954, there was a decrease of 21.9 per cent in the number of customers reporting shipments received in a physically damaged condition, compared to the year ending August 31, 1953. By 'damaged' the service department means that the package of nursery stock was in some way injured, either broken or torn, or that the stock within the package was broken or bruised. That is, in this particular category, damage means physical damage of some sort to the shipment.

"In the service department report on quality covering the same period, the following data were given, which to us is astounding:

"For the year ending August 31, 1954, there was a reduction of 84.1 per cent in complaints by customers of plants that reached them in poor quality; that is, dried out, rotted, heated or any of the other categories that denote a poor appearing plant when it reached the customer other than physical damage.

"A careful examination was made here to ascertain whether or not any one item in 1953 may have given a great deal of trouble, and thus built up the quality complaints for that year. We found that not to be true, and on checking back through the previous several years, we found that the sudden drop in 1954 could only be explained by better shipping methods which allowed the plants to reach the customer in much better condition.

"We are absolutely convinced that the above method of shipping is the one which should be used by the

[Concluded on page 27]

MAIL ORDER FOUNDERS



Bert W. Keith, of Keith Bros. Nursery, Sawyer, Mich., was presented with a handsome wrist watch at the conclusion of the recent meeting of the National Mail Order Nurserymen's Association at Chicago, by Eldon Burgess, Burgess Seed & Plant Co., Galesburg, Mich. Both were charter members of the association, and Mr. Keith served as secretary for the first fourteen years and Mr. Burgess as the first president, from 1934 until 1940. While they received valiant support from a dozen other charter members and were succeeded by officers as energetic, these two leaders were credited with the lion's share of the responsibility of guiding the association through its early years.

Top Speakers Fill Two Days at Eleventh Long Island School

By Daniel Dowd

Outstanding speakers discussed current topics at the eleventh annual school for nurserymen and employees, January 18 and 19, sponsored by the school of horticulture of the Long Island Agricultural and Technical Institute, with the New York State Nurserymen's Association co-operating. Over 125 visitors attended the meetings in Knapp hall on the campus at Farmingdale, L. I.

Projects at Farmingdale

Carl F. Wedell, head of the school of ornamental horticulture, after welcoming the nurserymen, told of recent developments at Farmingdale and of the outlook for the future. Despite a peak enrollment of 160 students in ornamental horticulture, it is not possible to begin to meet the needs of the industry, and the plea is made for nurserymen to send qualified candidates to the college. During the past year Farmingdale became one of the accredited test grounds for All America flower and vegetable trials. It continues the trials for the America Dahlia Society and also has conducted some significant research on garden roses. The chrysanthemum test garden displayed 325 varieties of garden mums last fall.

The Long Island Nursery Foundation has established a \$1,000 loan fund for students of the institute and supports an annual fellowship of \$3,000 for the running of tests and trials in nursery operation. Liquid assets of the foundation now total \$14,000.

This year the taxus collection is to be inaugurated on a 10-acre plot at Planting Fields, the estate of W. R. Coe, at Oyster Bay, L. I. This 409-acre estate was conveyed to State University of New York in 1949 and is to be the new campus for ornamental horticulture when arrangements are completed. The collections of orchids and rhododendrons have been greatly increased. In this collection it might be noted that the only public showing of Planting Fields is on azalea day, May 14, and rhododendron day, June 4. An admission contribution of \$1 goes toward the Planting Fields Foundation.

Dr. George Lawrence, of the Bailey Hortorium at Cornell Univer-

sity, in speaking of the importance of nomenclature to nurserymen, pointed out that there are about 8,000 more species known to be in cultivation today than in 1940. The total is now 35,000 and the number is constantly increasing. All of the authoritative reference texts are outdated or obsolescent, and work is progressing upon Hortus III, which should bring horticultural classification up to date; however, no date of publication is in immediate prospect.

Dr. Lawrence explained how some confusions have come to exist in horticultural taxonomy and of present efforts to make corrections in conformity with an international botanical code, which was adopted at the international plant congress in 1953. The new Hortus will include the common English names of plants when such names are in general use. The rule on capitalization of species names has been liberalized, so that for the most part capital letters are not used.

One of the services of the hortorium is to answer the many questions on nomenclature which come up. The extensive collection of nursery catalogs is valuable in locating plant materials and also as a historical record of our time. Nurserymen are urged to assist this project by putting the hortorium on their annual mailing list.

Dr. Lawrence's talk was illuminated with interesting sidelights relating to the late Dr. Liberty Hyde Bailey's character and contributions to horticulture.

Ethics in Advertising

Van Miller, a vice-president of the National Better Business Bureau, said that his organization regards advertising as the voice of business and took the view that nurserymen could develop much louder voices. Often nurserymen are not aware of the tremendous potential market which is open to their product in these times of new housing construction and mass moves to the suburbs. Some promotional advertisers have pointed the way with their campaigns to put over single plant varieties.

The better business bureau lies between the consumer and the producer and has the prime aim to see

that the public is served with honest value. In our free enterprise system it is much better that the advertising industry do its own policing rather than to fall under government regulation. Some regulatory bodies do exist such as the federal trade commission and the Post Office department. It is an encouraging thing that many advertisers seek the advice of the better business bureau before embarking on a large program.

Some suggestions on advertising are: Tell the customer what he wants to know. Give the true name; the correct sizes, delivered and when matured; hardiness; hardiness zones should be made known to people; cultural requirements. Do not exaggerate the yield. Tell who is selling the material. Give a forthright guarantee.

Nurserymen are asked to report irregularities to the BBB as a matter of self-interest. All correspondence is confidential. Leads are followed up by trained investigators. Copies of the fair trade code of the BBB can be procured from the office in your district.

Mist Control

Harvey Gray, instructor of nursery management, talked on the subject of vapor control. In the development of the subject Mr. Gray discussed the role of water in the living plant, the functioning of the conduction system in plants and the laws of diffusion of gases. He presented data which indicated the relative values of misting vs. film coverings in the propagation of woody plants from cuttings. The weight of evidence indicated greater economy of operation with use of film coverings (polyethylene). It was also indicated that a constant high vapor pressure could be maintained under film, whereas there is considerable fluctuation with a mist system under glass. Mr. Gray made no attempt to present a brief in favor of either system, but tried to stimulate individual thinking about the problem. However, the fact that he has gone over entirely to the use of polyethylene tents in the propagation house at the institute is definite indication of where his convictions lie.

Functions of an Arboretum

Roger Coggeshall, plant propagator at the Arnold Arboretum, spoke ably about the program of the arboretum as it related to nurserymen and his experiences in helping to make it an effective one.

One of the functions of an arboretum is the distribution of new and

Still another example of how Monrovia Nursery helps you build your business!

mn scientifically
blended soil
grows bigger
profits for you!

Choose from these popular
fast-selling liners!

Hundreds more are listed in MN's monthly catalog!



PRICES PER 100 PLANTS, F.O.B. MONROVIA

MINIMUM ORDER . . . 25 PER VARIETY

	2 1/4-in. Pots
Abelia grandiflora prostrata	\$30.00
Acer palmatum	15.00
Berberis mentorensis	20.00
Berberis thunbergii atropurpurea . . .	15.00
Cedrus libani	17.50
Euonymus radicans, upright	15.00
Fatsyhedera lizei variegata	25.00
Ilex cornuta burfordi	15.00
Ilex crenata bullata	17.50

	2 1/4-in. Pots
Juniperus sabina tamariscifolia	\$20.00
Mahonia aquifolium	15.00
Osmanthus fragrans	17.50
Pinus sylvestris regensis	15.00
Pyracantha Rosedale (T. M. Reg.) . .	17.50
Rosa rouletti	20.00
Salvia pitcheri	17.50
Viburnum suspensum	15.00



• No packing charges
on lining-out stock.

• Safety-shipped in
special lightweight
containers.

• Write for FREE
MONTHLY CATALOG.
Lists all varieties—
shows exact laid-down
prices to your door.

mn *Monrovia Nursery Co.*
P. O. Box 196, MONROVIA, CALIFORNIA

SCHROTH'S NURSERY

It Pays to Plant
The Best

SEEDLINGS

Excellent Root
Systems, Hardy
ORDER NOW!

Grown at High Altitude — In the Heart of the Original Pine Forests

WHOLESALE PRICES

	Pine Seedlings	Per 100	Per 1000
Scotch Pine, Riga,			
2-0, 2 to 4 ins.		\$ 2.00	\$12.50
2-0, 4 to 8 ins.		4.00	25.00
2-0, 6 to 12 ins.		5.00	30.00
3-0, 8 to 16 ins.		6.00	35.00
American Red Pine,			
2-0, 2 to 4 ins.		2.50	15.00
3-0, 4 to 6 ins.		4.00	25.00
3-0, 6 to 9 ins.		6.00	35.00
Austrian Pine,			
2-0, 3 to 4 ins.		3.00	15.00
2-0, 4 to 8 ins.		4.00	25.00
3-0, 8 to 14 ins.		6.00	...
White Pine,			
2-0, 3 to 6 ins.		2.50	15.00
3-0, 5 to 9 ins.		6.00	...
4-0, 8 to 16 ins.		7.00	35.00
Ponderosa Pine,			
2-0, 3 to 5 ins.		3.00	20.00
Mugho Pine (True Dwarf Tyrolean),			
2-0, well-budded		4.00	25.00
Norway Spruce,	Spruce Seedlings		
2-0, 2 to 4 ins.		2.50	15.00
2-0, 4 to 8 ins.		4.00	25.00
4-0, 10 to 16 ins.		5.00	30.00
White Spruce,			
2-0, 3 to 5 ins.		3.00	20.00
3-0, 5 to 10 ins.		5.00	35.00
Red Spruce,			
3-0, 3 to 5 ins.		2.00	15.00
3-0, 5 to 10 ins.		4.00	25.00
Black Spruce,			
4-0, 6 to 8 ins.		3.00	20.00
4-0, 8 to 12 ins.		5.00	30.00
Colorado Blue Spruce,			
2-0, 2 to 4 ins.		3.00	20.00
2-0, 4 to 6 ins.		5.00	35.00
3-0, 5 to 10 ins.		7.00	50.00
Englemann Spruce, None Available			...
Balsam Fir,	Fir Seedlings		
4-0, 5 to 9 ins.		7.00	50.00
Douglas Fir, None Available			...
European Larch,	Larch Seedlings		
3-0, 18 to 30 ins.		10.00	75.00
Carolina Hemlock,	Hemlock Seedlings		
2-0, 3 to 6 ins.		6.00	...
Canadian Hemlock,			
3-0, 6 to 12 ins.		10.00	80.00
American Arborvitae,	Arborvitae Seedlings		
3-0, 6 to 8 ins.		2.50	15.00
3-0, 8 to 12 ins.		4.00	30.00
Chinese Chestnut Seedlings (Blight-resistant)			
Chinese Chestnut,	10 Lots	100 Lots	1000 Lots
2-0, 12 to 24 ins.	\$0.25 ea.	\$0.20 ea.	\$0.15 ea.
3-0, 2 to 4 ft.	.50 ea.	.40 ea.	.30 ea.

(No Parcel-Post Shipments on 3-0 Chestnut)

5% discount on 25,000 or more of combined species.

(Exclusive of seedlings \$15.00 per 1000 and under.)

We guarantee all stock represented herein as to size and quality, or your money cheerfully refunded.

The name SCHROTH stands for the best. Your order will convince you. Make a Christmas tree planting this season. Scotch is the best bet. Do not delay. Send for complete listing and terms.

All stock offered subject to prior sale.

SCHROTH'S NURSERY, INDIANA, PA.

rare plants in seed, budwood or rooted cutting form. Since 1941 the Arnold Arboretum has been distributing material to nurserymen. The material is not patentable nor is it to be sold. It is given as propagating stock. Since the best propagation methods are not known for many of the new and rare plants, it has been one of the tasks of the propagator to investigate the various means. Many of the attempts at propagation have led up blind alleys. For instance, the arboretum has tested all of the hundred-odd kinds of maples to find a compatible understock for *Acer griseum*, a desirable small tree, but has had no success. As a nonprofit organization, the Arnold Arboretum is better fitted for this kind of research than commercial nurseries. It is planned to devote more time and facilities to nursery research in the near future.

Mr. Coggeshall told how the versatility of polyethylene plastic film has been proved in many of his operations. It is used successfully for budding strips, for grafting strips, for seed stratification, for starting seeds in flats, for rooting cuttings to the extent that the old sweat boxes have been entirely replaced. As a result some of the difficult subjects like pink dogwood, Japanese red maple and magnolias are now rooted regularly from cuttings instead of the cumbersome grafting processes. Also, the use of plastics permits the taking of less mature wood, which roots more easily in many instances.

On seedage methods, he said, seeds requiring no pretreatment are sown directly on sphagnum and covered until the first true leaves appear, at which time the cover is removed. This applies to ericads. Seeds with dormant embryos are placed in plastic bags and stratified for three months at 41 degrees, for a gain of two months over usual methods. Seeds with double dormancy caused by an impervious seed coat are put in plastic bags and left on the warm greenhouse bench for six months at high temperature and then for three months in the refrigerator to permit ready germination. This is a gain of nine months over outside planting.

Mr. Coggeshall discussed many other points on plant propagation which were of great interest to the group.

Can Culture

William C. Bowden, Jr., who has been conducting controlled tests for the Long Island Nurserymen's Foundation, reported upon results of experimentation with certain phases of can culture. These experiments

WHOLESALE SURPLUS LIST

LINING-OUT STOCK - SPRING, 1955

	Each 100 rate	Each 1000 rate		Each 100 rate	Each 1000 rate
1960 Abies concolor, 3-yr., T., 4 to 8 ins.	\$0.12	\$0.10	2000 Philadelphus Belle Etoile, 1-yr., C.	\$0.18	\$0.15
200 Acer dissectum atropurpureum, 1-yr., bedded grafts, 1-yr., S.	.90	.85	900 Philadelphus lemoinei, 2-yr., T., 6 to 9 ins.	.12½	.11
500 Acer palmatum, 1-yr., S.	.06	.05	300 Philadelphus virginialis, 2-yr., T., 6 to 9 ins.	.09½	.08
300 Acer palmatum atropurpureum, seed-grown, 3-yr., T.	.75	.70	1000 Photinia villosa, 1-yr., S.	.08	.07½
1000 Ampelopsis quinquefolia, 2-yr., S., 9 to 12 ins.	.06	.05	1300 Physocarpus monozygus, 2-yr., T., 6 to 9 ins.	.15	.12½
2500 Ampelopsis velutina, 1-yr., S., 12 to 18 ins.	.15	.12½	900 Picea canadensis alba, 3-yr., T., 4 to 9 ins.	.10	.09
1000 Ampelopsis velutina, 1-yr., S., No. 1.	.05	.04½	350 Picea canadensis alba, 4-yr., T., 6 to 12 ins.	.12	.10
3000 Aronia arbutifolia, 1-yr., S.	.06	.05	3720 Picea excelsa, 3-yr., T., 4 to 8 ins.	.10	.09
3500 Aronia melanocarpa, 1-yr., S.	.05	.04½	1634 3-yr., T., 6 to 12 ins.	.11	.09½
1000 Azalea amoena, 1-yr., T.	.25	.20	1700 5-yr., T., 9 to 18 ins.	.14	.12½
1000 Azalea arnoldiana, 1-yr., T.	.25	.20	1480 Picea pungens, 4-yr., T., 4 to 9 ins.	.15	.14
1000 Azalea calendulacea, 1-yr., T.	.25	.20	3000 Pinus mughus, 3-yr., T., 2 to 3 ins.	.10	.09
1000 Azalea kaempferi, 1-yr., T.	.25	.20	1906 Pinus nigra (austriaca), 5-yr., T., 18 to 24 ins.	.14	.12
1000 Azalea mollis, 1-yr., T.	.25	.20	15,000 Pinus strobus, 3-yr., T., 3 to 5 ins.	.09	.08
300 2-yr., T., 6 to 9 ins.	.30	.25	4000 Pinus strobus, 4-yr., T., 8 to 14 ins.	.12	.09
300 3-yr., T.	.35	.30	2348 Pinus sylvestris, 3-yr., T., 5 to 9 ins.	.10	.09
1000 3 buds and up, T., 12 to 15 ins.	.75	.65	8000 Pinus thunbergii, 3-yr., T., 6 to 12 ins.	.12	.10
5000 Berberis Crimson Pigmy, 2½-in. pots.	.25	.22½	740 Prunus kanzan, 1-yr., grafts, 6 to 12 ins.	.35	.30
1000 Berberis thunbergii, 2-yr., S., 6 to 9 ins.	.06	.05	290 1-yr., grafts, 12 to 18 ins.	.40	.35
2700 2-yr., S., 9 to 12 ins.	.07½	.06½	300 1-yr., whips, 18 to 24 ins.	.50	.45
1000 2-yr., S., 12 to 15 ins.	.10	.09	500 1-yr., whips, 2 to 3 ft.	.75	.70
7000 Berberis thunbergii atropurpurea, 2-yr., S., 6 to 9 ins.	.06	.05	200 2-yr., whips, 3 to 4 ft.	1.00	.90
7000 2-yr., S., 9 to 12 ins.	.07½	.06½	1000 Prunus maritima, light, T., 12 to 18 ins.	.30	.25
4000 2-yr., S., 12 to 18 ins.	.10	.09	1000 Prunus maritima, light, 4-yr., T., 2 to 3 ft.	.35	.30
6000 Celastrus orbiculata, 1-yr., T., 9 to 12 ins.	.05	.04½	1267 Pseudotsuga douglasii, 3-yr., T., 4 to 7 ins.	.10	.09
6000 Celastrus scandens, 1-yr., T.	.05	.04½	2500 Pseudotsuga douglasii, 3-yr., T., 5 to 10 ins.	.11	.09½
1400 Celtis occidentalis, 1-yr., T.	.09	.08	850 Rhamnus cathartica, 1-yr., S., 6 to 9 ins.	.07	.06
1000 Chamaecyparis plumosa, 2-yr., T.	.25	.20	3000 Rhamnus cathartica, 1-yr., S., 9 to 12 ins.	.07	.06
1000 Chamaecyparis plumosa aurea, 1-yr., T.	.18	.15	4000 Rhododendron kerrioides, 2-yr., T.	.12	.11
500 Chamaecyparis squarrosa K. & C., 2-yr., T.	.25	.20	1000 Rhododendron kerrioides, 1-yr., S.	.05	.04½
1175 Clethra alba rosea, 2½-in. pots.	.05	.04½	9000 Rosa multiflora japonica, grafting size.	.05	.04
1000 Cornus alba rosea, 1-yr., S.	.05	.04½	9000 Rosa multiflora japonica, 1-yr., S., 9 to 12 ins.	.05½	.04½
5000 Cornus florida, selected understocks.	.08	.07½	1000 Rosa rugosa, 1-yr., S.	.08½	.07½
1800 Cornus kousa, 1-yr., 6 to 9 ins.	.05½	.04½	1000 2-yr., T., 9 to 12 ins.	.15	.14
2000 Cotoneaster divaricata, 1-yr., S.	.10	.09	1500 2-yr., T., 12 to 15 ins.	.25	.20
1000 Cotoneaster horizontalis, 1-yr., S.	.15	.12½	4000 2-yr., T., 15 to 18 ins.	.35	.30
2000 Cotoneaster procox, 1-yr., S., 4 to 8 ins.	.25	.22½	1350 Silver Maple, 1-yr., S., 15 to 18 ins.	.05	.04½
1000 2-yr., T., 6 to 9 ins.	.35	.30	1000 Sorbus aucuparia, 2-yr., S., 9 to 12 ins.	.12	.10
1000 2-yr., T., 9 to 12 ins.	.50	.45	1200 2-yr., S., 12 to 18 ins.	.18	.15
400 Cryptomeria japonica lobbii compacta, 1-yr., bedded grafts	.75	.70	1000 2-yr., S., 18 to 24 ins.	.30	.25
7000 Cydonia japonica, 1-yr., T., 12 to 15 ins.	.04½	.04	700 Spiraea Anthony Waterer, 2-yr., T., 6 to 9 ins.	.15	.12
3000 Deutzia gracilis, 2-yr., T.	.12½	.11	900 Spiraea froebelii, 2-yr., T., 6 to 9 ins.	.10	.09
700 Deutzia lemoinei, 2-yr., T., 6 to 9 ins.	.12½	.11	1000 Symphoricarpos racemosus, 1-yr., S.	.04	.03½
2000 Eonymus alatus compactus, 1-yr., T., 6 to 10 ins.	.30	.25	600 Symphoricarpos vulgaris, 1-yr., C., 15 to 18 ins.	.03½	.03
1400 Eonymus atropurpureus, 1-yr., S., 4 to 6 ins.	.06	.05	1000 Syringa villosa, 1-yr., S., 3 to 6 ins.	.04	.03½
1200 Eonymus atropurpureus, 1-yr., S., 6 to 9 ins.	.09	.08	250 Syringa vulgaris, 2-yr., S., 6 to 9 ins.	.06	.05
300 Eonymus europaeus, 1-yr., S., 9 to 12 ins.	.09	.08	250 2-yr., S., 9 to 12 ins.	.07	.06
2000 Eonymus patens, small-leaved type, 1-yr., T.	.15	.12½	1000 2-yr., T., 12 to 15 ins.	.15	.14
1000 Eonymus radicans, 2-yr., TT.	.35	.30	1900 Tamarix Summer Glow, 1-yr., C.	.18	.15
1000 Eonymus radicans carrieri, 2-yr., TT.	.35	.30	5000 Taxus cuspidata capitata, 1-yr., S.	.06	.05
1000 Eonymus yedoensis, 1-yr., S., 4 to 6 ins.	.06	.05	1500 Thuja boothii, 2-yr., T.	.25	.24
800 1-yr., S., 9 to 12 ins.	.07	.06	770 Thuja brubakeri, 2-yr., T., 6 to 12 ins.	.30	.28
200 Forsythia spectabilis, 1-yr., C., 12 to 15 ins.	.06	.05	1700 Thuja compacta (Parson's), 2-yr., T.	.25	.24
400 Forsythia suspensa, 2-yr., T., 6 to 9 ins.	.15	.12½	500 Thuja hoveyi, 2-yr., T.	.25	.24
3000 Halesia tetrapetala, 1-yr., S.	.10	.09	8000 Thuja occidentalis, 3-yr., T., 6 to 9 ins.	.09	.08
1000 Hamamelis vernalis, 1-yr., S.	.10	.09	6750 Thuja occidentalis, 4-yr., T., 15 to 30 ins.	.12	.10
500 Hydrangea A. G., 2-yr., T., 6 to 9 ins.	.12½	.11	400 Thuja pyramidalis, 1-yr., bedded grafts	.50	.45
1000 Hydrangea P. G., 2-yr., T., 6 to 12 ins.	.15	.14	200 2-yr., bedded grafts, 18 to 24 ins.	.30	.25
400 Hydrangea P. G., 2-yr., T., 6 to 9 ins.	.12½	.11	500 2-yr., T., 6 to 9 ins.	.30	.25
300 Hypericum, 1-yr., S., 6 to 9 ins.	.06	.05	9000 Thuja canadensis, 3-yr., T., 6 to 12 ins.	.25	.20
1000 Iboia Privet, 1-yr., S., 4 to 6 ins.	.05	.04	2670 Thuja canadensis, 4-yr., T., 8 to 16 ins.	.30	.25
1500 1-yr., S., 6 to 9 ins.	.06	.05	800 Viburnum carlesii, transplanted seedlings	.35	.30
800 1-yr., S., 9 to 12 ins.	.07	.06	700 Viburnum dilatatum, 1-yr., C.	.10	.09
2000 Hex crenata (bullata), 2-yr., T., 6 to 10 ins.	.40	.35	800 Viburnum mofe, 1-yr., S., 6 to 9 ins.	.07	.06
500 Hex crenata, 2-yr., T.	.30	.25	2000 Viburnum setigerum (theliferum), 1-yr., S.	.15	.12½
500 Hex rotundifolia, 2-yr., T.	.25	.20	100 Weigela amabilis, 2-yr., T., 6 to 9 ins.	.10	.09
500 Juniperus depressa plumosa, 2-yr., T.	.30	.25	1000 Weigela Eva Rathke, 2-yr., T., 6 to 9 ins.	.15	.12
1500 Juniperus glauca heitzi, 2-yr., T., 6 to 9 ins.	.30	.25	600 Weigela floribunda, 1-yr., C.	.10	.09
1000 Juniperus glauca heitzi, 1-yr., T.	.18	.17½	500 Weigela rosea, 2-yr., T., 6 to 9 ins.	.15	.12
2000 Juniperus hibernica, 2-yr., T.	.30	.25	500 Weigela rosea variegata, 2-yr., T., 6 to 9 ins.	.15	.12
500 Juniperus pfitzeriana, 1-yr., T.	.25	.20			
500 Juniperus pfitzeriana, 2-yr., T., 6 to 9 ins.	.30	.25			
1000 Leucothoe catesbaei, 1-yr., T.	.25	.20			
1000 TT., 8 to 10 ins.	.40	.35			
1200 TT., 10 to 12 ins.	.50	.45			
500 Liriodendron benzoin, 1-yr., S., 6 to 9 ins.	.04½	.04			
700 Liriodendron benzoin, 1-yr., S., 6 to 9 ins.	.05	.04			
155 Lonicera korolkowi, 2-yr., T., 6 to 9 ins.	.15	.12½			
2000 Lonicera tatarica alba, 1-yr., C., 12 to 15 ins.	.05	.04½			
5000 Lonicera tatarica rosea, 1-yr., C.	.07½	.06½			
2000 Lonicera tatarica rubra, 1-yr., C.	.07½	.06½			
500 Magnolia soulangeana, 1-yr., T., 12 to 18 ins.	.75	.65			
200 Magnolia soulangeana, 2-yr., T., 18 to 24 ins.	1.00	.90			
100 Magnolia soulangeana nigra, 2-yr., T., 18 to 24 ins.	1.00	.90			
1000 Mahonia aquifolium, 1-yr., S., 4 to 6 ins.	.10	.09			
2000 2-yr., T., 6 to 9 ins.	.20	.18			
1200 2-yr., T., 9 to 12 ins.	.25	.22½			
350 Malus atrosanguinea, 1-yr., whips, 2 to 3 ft.	.35	.30			
325 Malus hopy rosea, 1-yr., whips, 2 to 3 ft.	.35	.30			
325 Malus lupulina, 1-yr., whips, 2 to 3 ft.	.35	.30			
220 Malus purpurea, 1-yr., whips, 2 to 3 ft.	.35	.30			
230 Malus schiedeckeri, 1-yr., whips, 2 to 3 ft.	.35	.30			
160 Malus spectabilis, 1-yr., whips, 2 to 3 ft.	.35	.30			
390 Malus Van Eiselstein, 1-yr., whips, 2 to 3 ft.	.35	.30			

Grafted material shipped in paper pots
after May 1, 1955

	Per 100
800 Acer dissectum atropurpureum	\$75.00
1400 Acer palmatum atropurpureum	65.00
1000 Cedrus atlantica glauca	60.00
150 Chamaecyparis obtusa crispata	50.00
200 Chamaecyparis obtusa gracilis compacta	45.00
500 Chamaecyparis obtusa gracilis nana	50.00
5000 Cornus florida rubra	45.00
400 Cornus florida alba plena	45.00
1750 Cryptomeria japonica lobbii compacta	60.00
500 Juniperus Hilli's Pyramidalis	45.00
600 Juniperus keteleeri	45.00
200 Juniperus pfitzeriana Kallay compacta	45.00
100 Juniperus sargentii	50.00
400 Picea merheimii	100.00
200 Picea pungens kosteriana	100.00
300 Rhododendron Boule de Neige	90.00
1000 Rhododendron Dr. H. C. Dresselhuys	90.00
1000 Rhododendron Mrs. P. den Ouden	90.00
2000 Thuja occidentalis pyramidalis	45.00
700 Thuja orientalis aurea nana	45.00
500 Viburnum burkwoodii	45.00
750 Viburnum carlesii	45.00
500 Viburnum chenaultii	45.00
300 Viburnum juddii	60.00

Prices quoted are 100 rate.

Less than 25 of a variety at 20% additional.

Please note—All pot grafts will be ready for shipment early May, 1955, at proper time—not before.

All the above is grown by our best growers of lining-out material. All F.O.B. shipping points, packing additional at cost. Usual terms to trade accounts. The above is listed subject to prior sale and subject to usual trade terms as mentioned in our trade lists. This cancels all previous lists. Our shippers will not fill orders for less than 100 at hundred rate, 250 at thousand rate.

E. D. ROBINSON SALES AGENCY

38 S. Elm St.

"A friendly, efficient service"

WALLINGFORD, CONN.

QUALITY EVERGREENS

BROAD-LEAVED EVERGREENS

Abelia Grandiflora
Buxus Harlandi
Buxus Sempervirens
Cotoneaster Francheti
Cotoneaster Horizontalis
Elaeagnus Fruitlandi
Elaeagnus Simoni
Euonymus Coloratus
Euonymus Fortunei Erectus
 (small leaf)
Euonymus Patens
Gardenia Fortunei
Ilex Cornuta Burfordi
Ilex Cornuta Femina
Ilex Crenata Convexa
Ilex Crenata Rotundifolia
Ilex Opaca East Palatka
 (heavily sheared)
Ilex Vomitoria
 (well sheared)
Pride of Houston
Jasminum Floridum
Laurel Cherry
 (well sheared)
Ligustrum Lucidum
 (Griffing type)
Ligustrum Lucidum
 (Black Wax)
Ligustrum Lucidum Nanum
Loropetalum Texanum
Magnolia Glauca
Magnolia Grandiflora
Magnolia Soulangeana
Magnolia Soulangeana Nigra
Nandiffa Domestica
Photinia Serrulata

CONIFERS

Arborvitae, Or. Baker
Arborvitae, Or. Berckmans
 (Aurea Nana)
Arborvitae, Or. Blue Cone
 (very compact)
Arborvitae, Or. Bonita
Arborvitae, Or. Bonita Golden
Arborvitae, Or. Excelsa
Arborvitae, Or. Fruitland
 (Green Berckmans)

CONIFERS, cont. *

Arborvitae, Or. Newark
Arborvitae, Occ. Globosa
Arborvitae, Occ. Pyramidalis
Arborvitae, Occ. Nigra
 (Dark Green)
Cedrus Deodara
Juniper, Andorra
Juniperus Excelsa Stricta
Juniperus Glauca Hetzi
Juniperus Glauca Hetzi
 (staked and sheared)
Juniperus Fastigiata
Juniperus Hibernica
 (Irish)
Juniperus Pfitzeriana
Juniperus Pfitzeriana Compacta
Juniper Pfitzeriana Aurea
Juniperus Sabina
Juniperus Sabina Vonehron
Juniperus Sabina Vonehron
 (staked and sheared)
Juniperus Scopulorum
Juniperus Sylvestris
 (Chinensis Femina)
Juniperus Virginiana Burki
Juniperus Virginiana Canaerti
Juniperus Virginiana Dundee
Juniperus Virginiana Glauca
Pinus Mughus
Pinus Nigra
 (Austrian Pine)
Pinus Sylvestris
 (Scotch Pine)

CANNED STOCK

Abelia Grandiflora
Gardenia Fortunei
Gardenia Mystery
Ilex Burfordi
Ilex Convexa
Ilex Rotundifolia
Ilex Helleri
Magnolia Grandiflora
Pyracantha Formosana
 (light)
Pyracantha Lalandi
 (light)
Crape Myrtle

Price and Quality Guaranteed to Please.

Visit us—Highway 72, 20 mi. east of Memphis.

CARTWRIGHT NURSERIES
COLLIERVILLE, TENN.

Phone 4352

will continue. Mr. Bowden's current observations will be published in a subsequent issue.

Native Plants

Russell Harmon, of LaBars' Rhododendron Nursery, Stroudsburg, Pa., in his talk on the landscape values of native plants, commented upon the wider selection of broad-leaved material which is possible in the New York metropolitan area, but reminded listeners that a real cold winter is again possible and then to beware. Many of our native azaleas are the best for cold climate planting. The adaptation of these plants may be observed in part by studying them in their native habitats. However, ecology does not hold all of the answers, since some marsh plants will also adapt to upland soils. Some of these adaptable swamp growers are *Azalea viscosa*, *A. vascyi*, *A. arborescens*, *Rhodora canadensis*, *Kalmia angustifolia* and *Leucothoe catesbaei*. *Azalea rosea*, which is similar to *A. nudiflora*, will stand considerable cold, as will *Pieris floribunda*.

Some native materials suitable for shade plantings were suggested as ground covers. They included *Kalmia angustifolia*, *Taxus canadensis*, *Xanthorhiza apifolia*, *Rhodora canadensis*, *Shortia galacifolia*, native ferns, *Gaylussacia brachycera*, *Leio-phyllum buxifolium* and *Asarum canadense*.

Mr. Harmon made a strong plea for the wider use of multistemmed small trees for their unique value in naturalistic landscape planting. With such plants the strong vertical accent of single trunks is lost. Some of the trees that might have use in this category are *Amelanchier canadensis* and *A. laevis*, *Oxydendron arborescens*, *Carpinus caroliniana*, *Chionanthus virginica*, *Cornus alternifolia* and *C. florida*, *Magnolia glauca*, *Virburnum prunifolium*, *Fagus grandifolia* and *tsuga*. White pines of loose, open habit, instead of the dense sheared ones, were viewed as a welcome change.

Kodachrome slides showing some of the ericads as seen in the southern Appalachians and others demonstrating the application of principles were used during the talk.

Plant Galls

Dr. Louis Pyenson lectured on the subject of plant galls and showed slides of many of the curious plant deformations. Each gall-forming agent is responsible for a specific kind of gall on a specific kind of plant. Since their effects are not

vital to the general health of plants, they are often disregarded by nurserymen. However, the sales value of stock may be affected by their presence; so controls are justified. Galls are known to be caused by certain mites, aphids, midges, wasps, bacteria, fungi and nematodes.

The spruce gall aphid is controlled with nicotine sulphate or malathion applied on warm days in March or April. Oak galls are caused by about 100 kinds of wasps; controls would require more knowledge of their life cycles. Probably DDT sprays in May and June would be effective in most cases. The erinose leaf mite attacks beech and oak and is controlled by dormant oil or dinitros. Box leaf psyllids are controlled with DDT sprays in June.

Root knot nematodes require soil fumigation with chlorpicron or ethylene dibromide. Bacterial crown gall on roots of roses, rhododendrons and other plants may sometimes be excised with a sharp knife, and black knot on cherry or plum should be pruned out. The azalea leaf gall fungus is controlled with Bordeaux mixture at the time of leaf emergence. Cedar-apple galls should be controlled by fungicidal spray or pruned off to prevent the rusting of apples and hawthorns. In attempting to control the plant galls it is first necessary to be able to recognize the gall and to know which type of organism is the causative agent.

Estimating Landscape Costs

Allan Dalsimer, of Landscape Associates, Glen Head, N. Y., spoke authoritatively upon the subject of estimating landscape costs. In determination of a selling price there are three factors to reckon: direct cost, indirect cost and profit, of which the indirect costs are most often underestimated. Indirect costs in landscape transactions are numerous and

[Continued on page 59]

POLYETHYLENE WRAP

[Concluded from page 21.]

entire mail-order nursery industry in the future for the good of our customers. At the present time, we are making these shipments under letters of permit from the Post Office Department after having shipped them a series of sample shipments previously to acquaint them with this new method of sending nursery stock through the mail. We do request that consideration be given to amending the P. L. & R. to sanction this type of shipping for the entire industry."

FLOWERING CRAB APPLE

	Per 10	Per 100
Atrosanguinea. Purple-bronze foliage, rosy-lavender flowers. Purplish fruit.		
5 to 6 feet.....	\$15.00	\$140.00
4 to 5 feet.....	12.00	110.00
3 to 4 feet.....	8.50	80.00
2 to 3 feet.....	5.50	50.00
4 to 5 feet, whips.....	8.50	80.00
3 to 4 feet, whips.....	5.50	50.00
2 to 3 feet, whips.....	4.00	35.00

Almey (Rosy Bloom). New! Deep crimson buds open to huge scarlet blooms with white starlike markings at base of each. Scarlet fruits. Excellent tree to pot for cash-and-carry sales. Usually blooms same year it is planted.

5 to 6 feet.....	30.00	275.00
3 to 4 feet.....	15.00	140.00
4 to 5 feet, whips.....	15.00	140.00
3 to 4 feet, whips.....	11.00	100.00
2 to 3 feet, whips.....	9.50	90.00

Dolgo. White flowers, large, showy, red fruit; good for jelly.

4 to 5 feet.....	9.50	90.00
3 to 4 feet.....	6.50	60.00
2 to 3 feet.....	4.50	40.00
3 to 4 feet, whips.....	4.50	40.00
2 to 3 feet, whips.....	3.00	25.00

Eleyi (Eley Crab Apple). Foliage red in spring, flowers vinous-red, single; fruit red.

5 to 6 feet.....	15.00	140.00
4 to 5 feet.....	12.00	100.00
3 to 4 feet.....	8.50	80.00
2 to 3 feet.....	6.50	60.00
3 to 4 feet, whips.....	6.50	60.00
2 to 3 feet, whips.....	4.50	40.00

Hopa. In the spring the expanding foliage is bronzy-red but, before the leaves are fully developed the whole tree bursts into bloom, being completely covered with the most magnificent, fragrant, pink flowers.

5 to 6 feet.....	12.00	110.00
4 to 5 feet.....	9.00	85.00
2 to 3 feet.....	4.50	40.00
4 to 5 feet, whips.....	7.00	65.00
3 to 4 feet, whips.....	4.50	40.00
2 to 3 feet, whips.....	3.00	25.00

Floribunda, Red Fruiting (Japanese Flowering Crab Apple). Buds coral-red; flowers pale pink turning to snow-white. The fruits on this variety are a showy red instead of the usual yellow.

4 to 5 feet.....	12.00	110.00
3 to 4 feet.....	8.50	80.00
2 to 3 feet.....	5.50	50.00
3 to 4 feet, whips.....	5.50	50.00
2 to 3 feet, whips.....	4.00	35.00

Niedzwetzkyana (Red-Vein Crab Apple). Single, red flowers, red fruit; bark and wood reddish.

5 to 6 feet.....	15.00	140.00
4 to 5 feet.....	12.00	110.00
3 to 4 feet.....	8.50	80.00
3 to 4 feet, whips.....	5.50	50.00
2 to 3 feet, whips.....	4.00	35.00

Red Silver. Silver and red foliage. Crimson flowers, red fruit.

4 to 5 feet.....	12.00	110.00
3 to 4 feet.....	8.50	80.00
3 to 4 feet, whips.....	5.50	50.00
2 to 3 feet, whips.....	4.00	35.00

Scheideckeri. Flowers pale pink and semidouble. Yellow fruit.

4 to 5 feet.....	12.00	110.00
3 to 4 feet.....	8.50	80.00
3 to 4 feet, whips.....	5.50	50.00
2 to 3 feet, whips.....	4.00	35.00

THE WILLIS NURSERY CO.

"Your Wholesale Nurserymen"

OTTAWA, KAN.

20 MILLION

MUSSER - - Spring

50 at 100 rate, 500 at 1000 rate

Per 100 Per 1000

• SCOTCH PINE—Riga Strain

2-yr., S., (2-0), 2 to 4 ins. \$3.00 \$15.00
3-yr., S., (3-0), 5 to 9 ins. 5.50 27.50

• SPECIAL STRAIN SCOTCH PINE

Very best Christmas tree strain. Grown from seed collected by our own men from selected parent trees. Exceptionally healthy, sturdy, straight-stemmed specimens, with rich color.

2-yr., S., (2-0), 4 to 8 ins. \$5.00 \$25.00
3-yr., S., (3-0), 5 to 10 ins. 7.00 35.00

Above stock can be used for direct field planting.

3-yr., S., (3-0), 8 to 12 ins. \$12.00 \$60.00
3-yr., T., (2-1), 5 to 10 ins. 15.00 75.00

4-yr., T., (3-2), 6 to 12 ins. 20.00 100.00

*6-yr., TT., 16 to 20 ins. \$1.00 Each

*6-yr., TT., 18 to 24 ins. 1.50 Each

*Sold in lots of 5 or more. Individually packed with ball of peat moss.

• WHITE PINE

One of the best timber species. Excellent windbreak and hedge. Very good ornamental and Christmas tree.

2-yr., S., (2-0), 3 to 5 ins. \$4.00 \$20.00

3-yr., S., (3-0), 4 to 8 ins. 6.00 30.00

Excellent stock for field planting.

3-yr., S., (3-0), 5 to 10 ins. \$8.00 \$40.00

4-yr., T., (3-1), 5 to 10 ins. 12.00 60.00

5-yr., T., (3-2), 10 to 18 ins. 20.00

• AUSTRIAN PINE

Good timber species. A beautiful, dark green, long-needed ornamental and Christmas tree, grown from selected seed from the Austrian Alpine region.

2-yr., S., (2-0), 2 to 4 ins. \$4.00 \$20.00

2-yr., S., (2-0), 3 to 6 ins. 5.00 25.00

3-yr., S., (3-0), 6 to 12 ins. 7.00 35.00

3-yr., S., (3-0), 8 to 14 ins. 10.00 50.00

Two last items above are excellent size for direct field planting.

3-yr., T., (2-1), 5 to 10 ins. \$15.00 \$75.00

6-yr., TT., 12 to 18 ins. 75.00

*6-yr., TT., 12 to 18 ins. \$1.00 Each

*7-yr., TT., 18 to 24 ins. 1.50 Each

*Sold in lots of 5 or more. Individually packed with ball of peat moss. Use this for an early ornamental or windbreak.

• AMERICAN RED PINE

Excellent timber and Christmas tree. Seed selected by our own men from outstanding specimen trees in finest American virgin forests.

2-yr., S., (2-0), 3 to 5 ins. \$5.00 \$25.00

3-yr., S., (3-0), 8 to 12 ins. 9.00 45.00

Field planting size.

3-yr., T., (2-1), 4 to 8 ins. 12.00 60.00

4-yr., T., (3-2), 6 to 10 ins. 25.00

6-yr., TT., 16 to 18 ins. 75.00

*7-yr., TT., 18 to 24 ins. \$1.00 Each

*8-yr., TT., 24 to 32 ins. 1.50 Each

*Sold in lots of 5 or more. Individually packed with ball of peat moss. Use this for an early ornamental or windbreak.

• MUGHO PINE—True Dwarf

Compact, low-growing Ornamental Pine.

3-yr., S., (3-0), 3 to 5 ins. \$5.00 \$25.00

3-yr., S., (3-0), 4 to 6 ins. 7.00 35.00

4-yr., S., (4-0), 6 to 10 ins. 9.00 45.00

4-yr., T., (3-1), 4 to 7 ins. 14.00 65.00

5-yr., T., (3-2), 6 to 12 ins. 16.00 80.00

• MUSSER EXCLUSIVE NORWAY SPRUCE

Grown from seed collected by our own men from selected trees. Exceptionally fast-growing, straight-stemmed stock makes this strain especially desirable for Christmas trees, ornamentals and timber.

2-yr., S., (2-0), 5 to 10 ins. \$7.00 \$35.00

3-yr., S., (3-0), 10 to 14 ins. 10.00 50.00

3-yr., T., (2-1), 6 to 12 ins. 14.00 65.00

5-yr., T., (3-2), 10 to 16 ins. 25.00

• NORWAY SPRUCE

2-yr., S., (2-0), 2 to 4 ins. \$3.00 \$15.00

2-yr., S., (2-0), 3 to 6 ins. 5.00 25.00

3-yr., S., (3-0), 5 to 10 ins. 7.00 35.00

4-yr., T., (3-1), 4 to 12 ins. 12.00 60.00

5-yr., T., (3-2), 6 to 12 ins. 16.00 80.00

*7-yr., TT., 12 to 18 ins. \$1.00 Each

*8-yr., TT., 18 to 24 ins. 1.50 Each

*9-yr., TTT., 24 to 32 ins. 2.50 Each

*Sold in lots of 5 or more. Individually packed with ball of peat moss.

• WHITE SPRUCE

Fast-growing strain. Similar to Norway Spruce except for its lighter color and slower growth rate.

2-yr., S., (2-0), 4 to 8 ins. \$5.00 \$25.00

3-yr., S., (3-0), 8 to 14 ins. 10.00

4-yr., T., (2-2), 10 to 16 ins. 20.00 100.00

• BLACK HILLS SPRUCE

Fine ornamental. Most compact spruce.

2-yr., S., (2-0), 2 to 5 ins. \$5.00 \$25.00

• SERBIAN SPRUCE—Picea omorika

Valuable ornamental. Tall, symmetrical habit of growth, with very narrow branch spread. Needles $\frac{1}{2}$ to $\frac{3}{4}$ in. long. Glossy green.

2-yr., S., (2-0), 2 to 4 ins. \$8.00 \$40.00

2-yr., S., (2-0), 4 to 8 ins. 12.00 60.00

• ENGELMANN BLUE SPRUCE

2-yr., S., (2-0), 2 to 4 ins. \$5.00 \$25.00

• COLORADO BLUE SPRUCE

Excellent stock, finest in the country. One of the finest for ornamental and Christmas tree use. Sturdy and compact in form; straight stems. Range in color from slightly blue-green to marvelous blue. The seed has been collected at very high cost from trees showing only the best characteristics.

2-yr., S., (2-0), 2 to 4 ins. \$5.00 \$25.00

2-yr., S., (2-0), 3 to 6 ins. 7.00 35.00

3-yr., S., (3-0), 5 to 10 ins. 12.00 60.00

Very superior stock.

3-yr., T., (2-1), 4 to 7 ins. 15.00 75.00

4-yr., T., (2-2), 6 to 10 ins. 30.00 150.00

4-yr., T., (2-2), 8 to 12 ins. 40.00 200.00

*7-yr., TT., 10 to 15 ins. \$1.00 Each

*Sold in lots of 5 or more. Individually packed with ball of peat moss.

• CANADIAN HEMLOCK

Lacy, graceful growing habit. Can be sheared to any size. Hedges, specimen ornamentals. Full shade or full sunlight.

2-yr., S., (2-0), 3 to 6 ins. \$11.00 \$55.00

3-yr., S., (3-0), 6 to 12 ins. 17.00 85.00

5-yr., T., (3-2), 8 to 12 ins. 50.00

*7-yr., TT., 15 to 20 ins. \$1.50 Each

*Sold in lots of 5 or more. Individually packed with ball of peat moss.

• BALSAM FIR

Extensively used for Christmas trees and ornamentals.

3-yr., S., (3-0), 3 to 5 ins. \$8.00 \$40.00

5-yr., T., (3-2), 5 to 10 ins. 20.00

*7-yr., TT., 12 to 18 ins. \$1.00 Each

*8-yr., TT., 18 to 24 ins. 1.50 Each

*Sold in lots of 5 or more. Individually packed with ball of peat moss. This is field grown, well branched for an early ornamental.

• DOUGLAS FIR

Hardy Rocky Mountain type. Superior ornamental and Christmas tree.

2-yr., S., (2-0), 4 to 8 ins. \$8.00 \$40.00

3-yr., S., (3-0), 8 to 12 ins. 14.00 70.00

4-yr., T., (2-2), 8 to 10 ins. 20.00

• CONCOLOR FIR

Excellent ornamental. Silver trunk and soft silver foliage. One of the best Christmas trees. Holds needles best of any short-needed tree.

2-yr., S., (2-0), 5 to 10 ins. \$12.00 \$60.00

3-yr., S., (3-0), 8 to 14 ins. 17.00 85.00

• VEITCHI FIR

Fine ornamental. One of the slow-growing Firs. Needles are dark green, silver on the underside. An excellent plant for table-size Christmas tree.

3-yr., S., (3-0), 3 to 6 ins. \$16.00 \$80.00

• BLUE ATLAS CEDAR

Cedrus atlantica glauca. Grown from seed. Silvery to light green needles, pyramidal form. Similar in appearance to Japanese Larch but does not lose its needles in fall.

2-yr., S., (2-0), 6 to 12 ins. \$15.00 \$100.00

3-yr., S., (3-0), 12 to 24 ins. 30.00

• AMERICAN ARBORVITAE

Popular for hedges and ornamentals.

3-yr., S., (3-0), 5 to 10 ins. \$10.00

4-yr., T., (3-1), 8 to 14 ins. 20.00

*6-yr., T., 20 to 24 ins. \$1.75 Each

*Sold in lots of 5 or more. Individually packed with ball of peat moss.

• ORIENTAL ARBORVITAE—Biota orientalis

Grown from seed. A very good ornamental with pyramidal form and light green foliage. Also used as understock for grafting Biota varieties.

2-yr., S., (2-0), 5 to 10 ins. \$8.00 \$40.00

2-yr., S., (2-0), 10 to 15 ins. 12.00 60.00

• GLOBE ARBORVITAE—Transplants

Plants started from rooted cuttings assure true strains.

Woodward, dark green

1-yr., T., 4 to 6 ins. \$30.00 \$200.00

Heavy stems

1-yr., T., 4 to 6 ins. 30.00 200.00

2-yr., T., sheared back to

6 to 8 ins. 40.00

Heavy stems.

• PYRAMIDAL ARBORVITAE—Transplants

All plants started from rooted cuttings to assure true strains.

Compact, light green

1-yr., T., 4 to 6 ins. \$25.00 \$200.00

2-yr., T., 10 to 16 ins. 40.00 350.00

Extra-heavy stems. Very nice plants.

*TT., field-grown, 18 to 24 ins. \$2.25 Each

*Sold in lots of 5 or more. Individually packed with ball of peat moss.

Nigra, dark green

2-yr., T., 10 to 15 ins. \$40.00 \$350.00

Extra-heavy stems. Very nice plants.

• JAPANESE BLACK PINE—Pinus thunbergii

Light green needles, $4\frac{1}{2}$ ins. long. Hardy, valuable for use in exposed conditions along the seashore. Very fast growing.

2-yr., S., (2-0), 2 to 4 ins. \$7.00 \$35.00

3-yr., S., (3-0), 7 to 12 ins. 10.00 50.00

• PONDEROSA PINE

Hardy, fast-growing Western Yellow Pine

—Timber tree.

2-yr., S., (2-0), 2 to 4 ins. \$4.00 \$20.00

3-yr., S., (3-0), 5 to 10 ins. 6.00 30.00

• JUNIPER, PFITZER—Pfitzeriana

Green. Slow-growing.

1-yr., T., 4 to 6 ins. \$40.00

• JUNIPER, BLUE PFITZER—Hetzi glauca

This improved Juniper with its irregular spreading habit, fast growth and bluish color can be used extensively in landscape work. Preferred by many for foundation plantings.

1-yr., T., 6 to 8 ins. \$25.00 \$200.00

2-yr., T., 6 to 10 ins. 65.00

3-yr., TT., 10 to 15 ins. 90.00

*TTT., spread 15 to 20 ins. \$2.75 Each

*Field-grown—Ornamental size. Extra-

nicely plants. Sold in lots of 5 or more.

Individually packed with ball of peat moss.

ASK FOR COMPLETE CATALOG AND WHOLESALE PLANTING LISTS. ALSO FAMOUS CHRISTMAS TREE GROWERS GUIDE.

All stock grown from Selected Seeds and Cuttings
CAREFUL GRADING and PACKING

ORDER NOW
WRITE or PHONE 5-5686



TREES a Year!

Wholesale Planting List

50 at 100 rate, 500 at 1000 rate

Per 100 Per 1000

JUNIPER, ANDORRA—Creeping Variety

Excellent for terraces.

1-yr., T., 4 to 6 ins. \$25.00

JUNIPER, WAUKEGAN—Green

Fast-growing creeper. Matured height

about 15 ins. Spreads to 4 or 5 ft.

1-yr., T., 6 to 10 ins. \$30.00

JUNIPER, WAUKEGAN—Blue

Same growing habit as the green type.

1-yr., T., 6 to 10 ins. \$30.00

JUNIPER, UPRIGHT—Virginiana

3-yr., S., (3-0), 8 to 18 ins. \$8.00

*T.T., field-grown, 24 to 36 ins. \$2.00 Each

*Sold in lots of 5 or more. Individually

packed with ball of peat moss.

JAPANESE YEW

(Taxus cuspidata capitata)

Upright, pyramidal

Grown from seed. Extra-nice plants; ex-

cellent, fibrous roots.

2-yr., S., (2-0), 4 to 8 ins. \$15.00 \$125.00

3-yr., S., (3-0), 8 to 12 ins. 40.00

Excellent plants, branched, with heavy

stems.

*6-yr., T.T., 12 to 18 ins. \$2.00 Each

*6-yr., T.T., 18 to 24 ins. 2.50 Each

*Sold in lots of 5 or more. Individually

packed with ball of peat moss. These are

semifinished ornamentals.

JAPANESE YEW—Transplants

True strains from rooted cuttings.

Taxus cuspidata, spreading

1-yr., T., 6 to 8 ins. \$20.00 \$150.00

2-yr., T., 8 to 12 ins. 30.00 250.00

2-yr., T., 8 to 12 ins. 45.00

Taxus hicksii, upright

1-yr., T., 6 to 8 ins. 20.00 175.00

Taxus hunekei, upright

1-yr., T., 6 to 8 ins. 25.00 200.00

Taxus mucronata, upright

1-yr., T., 6 to 8 ins. 30.00

Taxus brownii, upright

1-yr., T., 6 to 8 ins. 25.00 200.00

2-yr., T., 8 to 12 ins. 35.00

2-yr., T., 8 to 12 ins. 45.00

Taxus halimifolia, upright

Broad, columnar growth habit.

1-yr., T., 4 to 6 ins. \$25.00

*T.T., 15 to 18 ins. \$2.25 Each

*Sold in lots of 5 or more. Individually

packed with ball of peat moss.

JAPANESE HOLLY

Excellent evergreen shrub and hedge.

ILEX CRENATA

2-yr., S., 3 to 6 ins. \$20.00 \$100.00

ILEX CRENATA CONVEXA

True strains from cuttings.

1-yr., T., 5 to 8 ins. \$25.00 \$200.00

*2-yr., T., 8 to 10 ins. 50.00

Fine, nicely branched plants.

*10 may be ordered at 100 rate.

ILEX ROTUNDIFOLIA—Round-leaved

Grown from cuttings.

1-yr., T., 5 to 8 ins. \$25.00 \$200.00

ILEX GLABRA—Inkberry Holly

1-yr., T., 5 to 8 ins. \$25.00

BARBERRY—Red

Unusually good red color. Excellent hedge

plants. Red leaves in summer; red berries

in fall and winter.

2-yr., S., (2-0), 4 to 10 ins. \$10.00 \$50.00

3-yr., S., (3-0), 8 to 15 ins. 16.00 80.00

BARBERRY—Green

2-yr., S., (2-0), 8 to 12 ins. \$8.00 \$40.00

JAPANESE ANDROMEDA—Pieris japonica

An excellent, broad-leaved evergreen.

Young foliage is usually a rich bronze in

spring, later turning a light green.

Creamy-white flowers in pendulous clus-

ters to 5 ins. long. Can be grown in shade

or full sun.

*3-yr., T.T., 10 to 12 ins. \$1.75 Each

*Sold in lots of 5 or more. Individually

paper wrapped. Very nicely branched,

semifinished ornamental size.

RHODODENDRON HYBRID—Transplants

Grown from seed from red-flowering

plants.

*T.T., 10 to 15 ins. \$1.75 Each

Mass of roots, individually paper wrapped.

*Sold in lots of 5 or more.

PIN OAK—Quercus palustris

Forms a symmetrical, pyramidal head

with long pendulous branches. The foli-

age is deeply cut and assumes a brilliant

red autumn color. Because of rapid

growth, it is much used for avenues and

lawn specimens.

2-yr., S., (2-0), 15 to 20 ins. \$20.00

NORWAY MAPLE—Acer platanoides

A large handsome tree with broad, round-

ed head. The leaves are rich green and

remain until late fall. Extensively used

for street and shade tree planting.

1-yr., S., (1-0), 6 to 10 ins. \$ 8.00 \$40.00

2-yr., S., (2-0), 10 to 15 ins. 14.00 70.00

3-yr., S., (3-0), 20 to 36 ins. 75.00

SUGAR MAPLE

2-yr., S., (2-0), 6 to 12 ins. \$10.00 \$50.00

JAPANESE MAPLE

Small red-leaved Maple used as an orna-

mental.

1-yr., S., (1-0), 3 to 5 ins. \$10.00 \$50.00

RED OAK—Quercus borealis

Hardy northern Oak.

A rapid-growing tree forming a large,

round head. The foliage becomes dark

red in autumn.

1-yr., S., (1-0), 6 to 10 ins. \$10.00 \$50.00

2-yr., S., (2-0), 10 to 18 ins. 14.00 70.00

TULIP POPLAR—Liriodendron tulipifera

One of the largest and most valuable

timber and ornamental trees. Handsome,

glossy, fiddle-shaped leaves, and in spring,

bell-shaped greenish-yellow flowers,

marked with an orange base.

2-yr., S., (2-0), 18 to 30 ins. \$10.00 \$50.00

WHITE BIRCH—Betula papyrifera

S., 16 to 24 ins. \$10.00 \$50.00

1-yr., T., 24 to 30 ins. \$25.00

LILACS—Syringa vulgaris

A large upright shrub to 20 ft. This is

common purple lilac. Probably the most

fragrant of any type.

1-yr., S., purple lilac,

6 to 12 ins. \$ 5.00 \$45.00

2-yr., S., purple lilac,

10 to 18 ins. 10.00 80.00

FLOWERING QUINCE—Cydonia japonica

Long a favorite ornamental because of its

pink to scarlet flowers, which appear be-

fore the leaves. Sometimes called Hurn-

ing Bush. Attains 10 to 12-ft. height.

2-yr., S., (2-0), 8 to 18 ins. \$20.00 \$100.00

GOLDEN-RAIN TREE—Koeleruteria panicu-

lata

3-yr., S., (3-0), 2 to 3 ft. \$30.00

SWEET SHRUB—Calycanthus floridus

A sweet-scented, old-time favorite, be-

loved for its dark reddish-brown, spicily

fragrant flowers. Will grow in shaded or

open areas to 6 ft. or more.

3-yr., S., (3-0), 18 to 24 ins. \$30.00

WHITE DOGWOOD—Cornus florida

One of the most beautiful of small trees.

Handsome in early spring with its white-

petaled flowers and again in fall with

bright red fruit and gorgeous leaf color-

ing.

1-yr., S., (1-0), 5 to 8 ins. \$ 9.00 \$45.00

2-yr., S., (2-0), 8 to 16 ins. 15.00 75.00

2-yr., S., (2-0), 16 to 24 ins. 18.00 90.00

GOLDEN CHAIN TREE—Laburnum anagy-

roides

Showy yellow flowers, borne in long droop-

ing clusters. These rank among the most

beautiful of flowering trees. Grows to

about 30 ft.

3-yr., S., (3-0), 18 to 24 ins. \$30.00

ROSA MULTIFLORA

For living fence and wildlife shelter and

food.

Graded 3 mm. and up,

10 to 18 ins. \$10.00 \$50.00

GROUND COVER

ENGLISH IVY—Evergreen Ivy

Rooted Cuttings, 5 to 9 ins. \$15.00

3-yr., T., 8 to 15 ins. 25.00

3 to 5 runners to each plant.

PACHYSANDRA TERMINALIS—Spurge

1-yr., plants, 2 to 4 ins. \$ 9.00 \$80.00

2-yr., heavy, T., 3 to 5 ins. 25.00

MYRTLE—Vinca minor, Periwinkle

Medium lining-out Grade. \$8.00 \$35.00

Note: S. stands for Seedlings

T. stands for Transplants

The figures such as (2-0), (2-1) or

(2-2-1) indicate the number of years

the trees have been in the seedbeds

and the transplant beds.

MUSSER FORESTS, Box 16B, INDIANA, PENNA.

Landscape Sales Critic At Virginia School

The annual school for nurserymen, held at the Virginia Polytechnic Institute, Blacksburg, January 3 to 15, was a most successful one. With the aim of training the individual, the registrations for the school were limited to the number which could be handled in one laboratory room.

This school was arranged and directed by Prof. Albert S. Beecher, landscape architect at the institute. While the programs for each of the two weeks were closely related, those who attended for one week were able to complete their assignments.

Discussions of plant propagation were led by Prof. van de Werken, of the horticultural staff. He also gave demonstrations on lettering, on free-hand sketching and on the use of crayons and water colors for tinting landscape plans.

Dr. S. S. Obenshain, head of the soils section at V. P. I., used 4-foot profiles of actual soil types occurring in three large areas of the state in a lecture to help the nurserymen understand the role played by hardpan

and tight subsoils in the life and growth of ornamental plants.

A talk on nurserymen's botany was made by Dr. W. P. Judkins, head of the department of horticulture at V. P. I.

Criticizes Sales Approach

As in former years, problems were assigned to individuals with a limit on time for their completion. Since most of those present are selling landscape jobs, special sessions were arranged this year for sales clinics. Outline plot plans and plans showing various elevations of buildings were prepared in advance. After a visit to the property and a limited time for working out a solution, individuals were asked to sell the job to the owner or to someone acting in his place. This was followed each time by a discussion of the salesman's presentation.

Some of the criticisms which were recorded by Professor Beecher follow:

Plunged immediately into sales talk without first carrying on a con-

versation with owners to get them into a proper mood.

Lacked warmth and displayed lack of enthusiasm over plan prepared, or the client's possibilities for developing a beautifully landscaped home.

Spent too much time talking about individual plants without first giving the customer a broad picture of how his proposed landscaping will give the home a completed look, year-round beauty, privacy, etc.

Failed to get the customer to talk or get excited about the proposed landscaping.

Displayed timidity and indecision.

Neglected to point out the strong points of the nursery company that he represents or the type of job that his company stands for.

Failed to use any visual aids such as quick sketches, pictures of plant material or before and after pictures of other landscape jobs completed to help support his sales talk.

Salesman directed attention exclusively toward the husband and failed to divide his attention equally between the husband and wife.

Did not ask for the order or press for a definite return appointment when the owner said, "I would like to think it over a little more."

Gave a lump sum price for the job,

PACKAGED ROSES

**GROWN RIGHT - DUG RIGHT - STORED RIGHT - PACKED RIGHT
SHIPPED WHEN YOU WANT THEM**

Expertly grown, these 2-year-old, field-grown bushes are scientifically wrapped and waxed to retain full vigor. Colored label and planting instructions on each package. Plants are held under ideal storage conditions for shipment now or later. To keep fresh stock on your counter, order one or more collections to be shipped every week or every month.

Available in collections of 100 bushes, 25 varieties or more included, in a wide range of colors. 75 per cent are Everblooming Hybrid Teas; 25 per cent are Climbers.

Colors assorted as follows: 35 per cent Red varieties, 15 per cent Pink varieties, 15 per cent White varieties, 20 per cent Yellow varieties, 15 per cent Two-tone varieties.

These collections have proved themselves time and time again! Grading is according to standards established by the American Association of Nurserymen. The low prices are the results of mass production and economic distribution and will enable you to meet, profitably, any legitimate competition.

COLLECTION "A"

100 Assorted Roses
No. 1 Grade
\$65.00 per collection

COLLECTION "B"

100 Assorted Roses
No. 1 1/2 Grade
\$55.00 per collection

COLLECTION "C"

100 Assorted Roses
No. 2 Grade
\$45.00 per collection

TERMS: NET CASH.

Subject to prior sale. F.O.B. Farmington.

GROWERS EXCHANGE, INC.

P. O. Box 398
FARMINGTON, MICHIGAN
PHONE: Farmington 1890



PACKAGED BULBS

EXPERTLY GROWN — CAREFULLY PACKED — ECONOMICALLY PRICED — COLORED LABEL — PLANTING INSTRUCTIONS ON EACH PACKAGE.

The eye-catching pictures, simple planting directions and the extremely low price make these self-selling, space-saving packages a fast-moving, highly profitable line to handle.

Your low-cost price is actually the 1,000 rate on bulk bulbs! No charge is made for packaging! This low price is the result of mass production in packing and distributing—so please do not ask us to break cases. All bulbs are blooming size.

Samples (1 each of the 8 items) will, however, gladly be sent on receipt of \$3.50. Shipped postpaid.

Case contains	Variety	Bulbs per pkg.
10 pkgs.	ABYSSINIAN GLADIOLUS	20
10 pkgs.	ANEMONES (Windflower)	20
10 pkgs.	GALTONIAS (Summer Hyacinth)	10
10 pkgs.	GLADIOLUS (Rainbow Mixture)	50
10 pkgs.	MONTBRETIAS (Miniature "Glad")	20
10 pkgs.	OXALIS (Lucky Shamrock)	25
10 pkgs.	RANUNCULI (Asiatic Rose)	20
10 pkgs.	TIGRIDIAS (Shellflower)	12
80 pkgs.	TOTAL	1770 bulbs



***SUGGESTED RETAIL**
at \$1.00 per pkg. \$80.00
YOUR COST
at 33 $\frac{3}{4}$ c per pkg. 27.00
YOUR PROFIT
PER CASE 53.00

YOUR COST: \$27.00 per case (1770 bulbs)

*Retail selling price is merely suggested. Packages can be sold for less if desired and still will show a substantial margin of profit.



DUTCH PEONIES

1 3 to 5-eye Root per Canister.
Clean, healthy single-crown roots, up to size and true to color. Packed 100 Canisters per case, as follows:
40 Red, 30 Pink, 30 White.
\$40.00 per case (100 canisters).
22.50 per half case (50 canisters).



BLEEDING HEARTS

1 3 to 5-eye Root per Canister.
True, Old-Fashioned Heart-Shaped Type. Plump, healthy roots, well eyed. Will bloom this Spring.
Packed 100 canisters per case.
\$40.00 per case (100 canisters)
22.50 per half case (50 canisters)



DAHLIA ROOTS

1 Large Root per Canister.

Large-Flowering Decorative Type. Fine large roots carefully packed. Colors: Bright Red, Yellow, Pink, Lavender, Bronze, White, Deep Violet, Dark Red. Packed 100 canisters per case in a well-balanced assortment of colors.

\$25.00 per case (100 canisters)



TUBEROUS-ROOTED BEGONIAS

Double, Camellia Type

Belgian-grown. Each package contains 4 different colors, and the 4 varieties are shown in color. Planting instructions on the back. A very attractive and very popular seller. Prices:

50c each in lots of 20
45c each in lots of 100

GROWERS EXCHANGE, INC. **FARMINGTON, MICH.**
P. O. Box 398
Phone: Farmington 1890

LINING-OUT STOCK

	Each per 100	Each per 1000
JUNIPERUS PFITZERIANA , silvery-blue strain		
1000 2-yr., X, 8 to 10 ins., field beds	\$0.35	\$0.32
5000 3-yr., XX, 12 to 15 ins., field beds	.45	.40
ILEX CRENATA (Japanese Holly)		
50,000 2-yr., S., 4 to 6 ins.	.10	.05
8000 3-yr., S., XX, 6 to 9 ins., field beds	.30	.25
ILEX CONVEXA (Bullata)		
1000 1-yr., X, flats, 4 to 6 ins.	.15	.14
15,000 2-yr., X, 6 to 9 ins., field beds	.25	.20
5000 3-yr., XX, 8 to 12 ins., field beds	.35	.30
PYRACANTHA COCCINEA LALANDI		
3000 1-yr., S., 4 to 8 ins.	.10	.08
4000 2-yr., S., X, 8 to 10 ins., deep flats	.20	.18
TAXUS CUSPIDATA , spreading		
1000 3-yr., X, 8 to 10 ins., field beds	.35	.30
AZALEAS , hardy, deciduous		
4500 <i>Mollis</i> , 2-yr., S., X, 4 to 6 ins., flats	.18	.16
700 <i>Nudiflora</i> , 2-yr., S., X, 3 to 6 ins., flats	.16	.14
1000 <i>Calendulacea</i> , 2-yr., S., X, 4 to 6 ins., flats	.16	.14
2000 <i>Vaseyi</i> , 2-yr., S., X, 3 to 4 ins., flats	.20	.18
700 <i>Schlippenbachii</i> , 2-yr., S., X, 4 to 6 ins., flats	.25	.22
EUONYMUS ALATUS		
200 3-yr., XX, 12 to 18 ins., field beds	.30	..
CORNUS FLORIDA (White-flowering Dogwood)		
1600 2-yr., S., X, 18 to 24 ins., field beds	.30	.25
400 2-yr., S., X, 24 to 30 ins., field beds	.40	.35

All above listed stock for shipment anywhere in the United States.

TERMS: Cash with order, 2% discount. Free packing. A total of 5% discount on orders of \$300.00 or more. 50 of each variety and size at 100 rate; 300 at 1000 rate.

BROOKFIELD GARDENS

U. S. Rt. 46

DELAWARE, N. J.

but failed to point out all the services the customer would receive.

Smoked a cigarette while pointing to plan.

Two periods were devoted to talks by Prof. A. G. Smith, Jr., on the subject, "Why Plants Die." These led to much discussion by the nurserymen. It was agreed that an ornamental plant is "dead" when it loses the color, texture or form for which it was used. Professor Smith also led discussions on pruning, lawns and identification of plants.

The use of various types of labels, which were supplied by dealers and manufacturers, was demonstrated by A. L. Eiser, Jr., instructor in horticulture at V. P. I.

On two nights during the school, the nurserymen were dinner guests at the home of Prof. and Mrs. A. G. Smith, Jr.

A. G. Smith, Jr.

WHITE AWARDED MEDAL

The George Robert White medal of honor for 1954 was awarded by the Massachusetts Horticultural Society to Dr. Richard P. White, executive secretary of the American Association of Nurserymen, Washington, D. C. "Dr. White has rendered outstanding service to the American nursery trade in pioneering a progressive program for professional horticulture in America," reads the society's announcement of the award. "He has striven for high standards in nursery practices and has been an outspoken opponent of false advertising. His efforts in advancing the 'Plant America' program have met with outstanding success in all parts of the country, especially in landscaping industrial plants."

The Jackson Dawson medal was awarded to Paul Vossberg, propagator of the Westbury Rose Co., Westbury, L. I., N. Y. Mr. Vossberg has made notable advances in the propagation of azaleas, rhododendrons and other choice woody plants.

The Thomas Roland medal given for exceptional skill in horticulture was awarded to Peter Arnott, of Chestnut Hill, Mass., superintendent of the estate of Mrs. Edwin S. Webster, for 45 years.

CERTIFICATE of incorporation was filed in January for Vanderbrook Nurseries, Inc., Manchester, Conn., the incorporators being Louis, Bruce and Rose W. Vanderbrook. Capital was listed at \$200,000, consisting of 2,000 shares of common stock at par value of \$100 each, with starting capital of \$175,000.

BIRD'S handy TOM THUMB FLATS bring customers back again and again



It's easy to see why. Easy to carry . . . No dirt, no mess in the car. Enthusiastic nurserymen report customers buy more potted annuals when they can be transported in simple efficient Tom Thumb Flats.

Customers come back too! They like to get their annuals in this attractive "package". But, also, they are reminded to come back through the Nursery Name dramatically imprinted on the Tom Thumb Flat.

Tom Thumb Flats are constructed of heavy waterproof fibre resinous material. Use with either of Bird's famous plant bands: Vita-Band

"10" or the disintegrating Vita-Band "D".

The most economical way to sell potted annuals is in dozen lots. Grow your plants — in Vita-Bands — in bench or flat. Grade them for size and appearance. Then transfer them, by grade, to Tom Thumb Flats. With this method, potted plants sell easier at premium prices. Build sales and repeat business with easier-to-sell potted plants in this neat package. Order from supplier's catalog, or write direct for information and name of nearest distributor to Bird & Son, inc., Dept. AN-2A, East Walpole, Massachusetts.

Combination 1M Flats 12M Vita-Band Per 1000 Sets		Combination 1M Flats 12M Vita-Band 10 Per 1000 Sets		Sold in Units of 250 Sets only Per Thousand	Tom Thumb Flats	
Size #1	Size #2	Size #1	Size #2		Size #1	Size #2
\$103.70	\$113.60	\$86.45	\$95.65		\$44.70	\$49.60

BIRD



VITA-BANDS • TOM THUMB FLATS
VITA-POTS • RED POTS

New England Meetings

MASSACHUSETTS MEETING

At the 46th annual meeting of the Massachusetts Nurserymen's Association, January 18, at the Hotel Kenmore, Boston, Mass., the following officers were re-elected: President, Harold C. Atwater; vice-president, Frank T. White; treasurer, Charles A. Godin; secretary, George M. Fellows, and directors, Mrs. Helen Anderson and Harold Stevenson. Heinrich Rohrbach was also elected director.

The treasurer's report, read by Charles A. Godin, showed a balance of \$1,553.07, including war bonds which matured in January. Kip Corliss read the report of the membership committee, showing a small gain in membership over the preceding year.

Dr. John Havis, director of the Waltham field station, spoke on "Activities and Functions at Waltham Station," assuring cooperation with nurserymen by the University of Massachusetts.

Dr. Robert Ticknor, assistant professor of nursery culture at Waltham station, enlightened members of the Massachusetts association with slide pictures and information on projects being carried on under his direction.

"Activities and Benefits Derived from Association with Organized Association" was the topic of a discussion by Curtis Porterfield, administrative assistant of the A. A. N., who opened the afternoon session. Heinrich Rohrbach entertained the group with pictures and an interesting talk on his recent trip through Europe.

At the afternoon business session, vote was in favor of recommendations by the president in his annual report as follows: Continued awards at the University of Massachusetts flower show; election of a committee to work with the university to arrange a short course at the college; election of a committee on research and extension, especially at the Waltham field station.

Other new business included passing motions to approve and offer full support of the A. A. N. program against unfair advertising and other unfair business practices; to revise the bylaws as recommended by the directors and to appropriate \$100 for continued membership in the Boston Better Business Bureau.

George M. Fellows,
Secretary.

CONNECTICUT COURSE

The third annual Connecticut nurserymen's short course, held at the University of Connecticut, Storrs, January 26 and 27, drew an attendance 60 per cent above last year's, with over 200 persons in attendance. Of these, about 150 were active nurserymen, and the others were students, faculty members, park superintendents and others interested in increasing their knowledge of our industry. In attendance were nurserymen from Connecticut, Massachusetts, Rhode Island, New Hampshire, Maine, New York, New Jersey and Pennsylvania.

The theme of the course was field planting and the growing on to maturity of nursery stock.

The committee from the association and the cooperating faculty of the university have endeavored to keep a balance between technical and practical speakers. A list of the speakers shows how well they

succeeded in doing just that this year.

Speakers on the first day are listed in the order in which they appeared: Dr. W. H. Camp, head of the department of botany, University of Connecticut; George Harris, Princeton Nurseries, Princeton, N. J.; Joel Barnes, Barnes Bros. Nursery Co., Yalesville, Conn.; Louis Vanderbrook, Vanderbrook Nurseries, Inc., Manchester, Conn.; Case Hoogendoorn, C. Hoogendoorn Nurseries, Newport, R. I., and Dr. L. C. Chadwick, Ohio State University, Columbus, Ohio.

Speakers on the second day were: Dr. M. A. McKenzie, plant pathologist, University of Massachusetts, Amherst; Dr. William Becker, entomologist, University of Massachusetts; Dr. L. C. Chadwick, and Russell Harmon, LaBar's Rhododendron Nurseries, Stroudsburg, Pa.

Each of these speakers presented a well prepared talk, which was followed by a question period.

Plans are already going forward to present the next short course January 25 and 26, 1956.

E. W. Whitham

QUEEN O' the LAKES

(Dark
Velvety
Red)

and 30 other fragrant
**SUB-ZERO
HYBRID TEAS**



Large and beautiful as any. Easy to grow; long to live. Bloom more; more constantly. Save replacement expense.

Tree Roses topped with all varieties can survive 15 degrees below zero without protection.

Also 20

Yellow and Orange Climbers

Also Florabundas and Grandifloras. Also many varieties of our new race of everblooming climbers which we call Everblooming Pillars. These bloom the first year like Hybrid Teas and on all stems and canes the year they grow; large Hybrid Tea blooms in great quantity.

These Roses have been honored by some of the leading Distinguished Service Medals.

Write for trade prices to

BROWNELL ROSES LITTLE COMPTON, R. I.



Stroudsburg, Pa.

CLEARANCE SALE CHINESE CHESTNUT TREES

About 8,000 trees. Approximately 50 per cent 3 to 5 ft.; 50 per cent 5 to 8 ft. Offered row run.

40c each in 1,000 lots.

Power dug and bunched F.O.B. MUST MOVE BY APRIL 1, 1955. First come, first served. Ready for shipment after November 10.

BOUNTIFUL RIDGE NURSERIES
PRINCESS ANNE, MD.



The most amazing lawn food
ever made...

and the easiest to sell!



WON'T BURN

when used in recommended
amounts

ONE FEEDING

lasts all season

ALL NUTRIENTS

needed from the soil to
nourish fine grass

Vigoro is a registered trade-mark of Swift & Company
Copyright 1955, Swift & Company

Unmatched Advertising Support

National Magazines—full color pages in LIFE, POST, BETTER HOMES, AMERICAN HOME, HOUSE BEAUTIFUL, SUNSET, HOUSE AND GARDEN, HOUSEHOLD, starting in February to catch spring sales.

Gardening Magazines—the full story told time and again to amateur gardeners in FLOWER GROWER, POPULAR GARDENING, HORTICULTURE.

Newspapers—a series of 800-line ads in larger cities the country over.

Outdoor Billboards—in heavy traffic locations bringing the story to millions.

IN THESE three points you have the greatest selling story in the history of lawn foods... and a product that took years of research to develop.

You can recommend new Golden Vigoro complete lawn food *unconditionally*. It's a miracle of plant food research—made a new way (Pat. No. 2618546, No. 2618547, others pending). So amazing is its performance you can count on it for repeat sales... and the good profit you deserve year after year. Get the full story from your Swift man now... stock up for the spring season!

SWIFT & COMPANY

Your best sellers in gardening supplies—

The **VIGORO** Family of Gardening Aids

CORNUS FLORIDA

(White-flowering Dogwood)

SPECIMEN CLUMPS—Multiple stems, broad tops and heavily branched.

	Each
3 to 4 ft., B&B	\$ 2.50
4 to 5 ft., B&B	3.75
5 to 6 ft., B&B	5.50
6 to 7 ft., B&B	6.50
7 to 8 ft., B&B	8.50
8 to 9 ft., B&B	10.50
9 to 10 ft., B&B	12.50

SINGLE TRUNK, AND MEDIUM CLUMPS (Two trunks or more).

3 to 4 ft., B&B	2.00
4 to 5 ft., B&B	2.75
5 to 6 ft., B&B	3.50
6 to 7 ft., B&B	4.75
7 to 8 ft., B&B	6.75
8 to 9 ft., B&B	7.50
9 to 10 ft., B&B	9.50

EXTRA-LARGE SPECIMENS—All extra full.

3-in. trunk, 10 to 12 ft. tall x 6 to 8 ft. wide	35.00
4-in. trunk, 10 to 12 ft. tall x 6 to 10 ft. wide	55.00
5-in. trunk, 10 to 15 ft. tall x 8 to 10 ft. wide	75.00

Specify height, width, single or multiple stem, height of branching, and we can obtain any size, shape or form.

BURLAPPING—All trees burlapped in rot-resistant burlap, balls laced tightly with rot-resistant sisal twine and rope. Tops bound securely and safely to prevent injury and breakage.

DELIVERY SERVICE—Open top, 32-ft. semi.

Chicago, St. Louis, Kansas City—40c per mi. one way.
Buffalo, Rochester, New York City, state of N. J., Washington, D. C.—45c per mi.
Cleveland, Columbus, Cincinnati, Dayton, Toledo and Detroit rates slightly higher.

One semi load will hold approximately 300 3 to 4 ft. to 7 to 8 ft.; 200 3 to 4 ft. to 9 to 10 ft., mixed; 150 6 to 7 ft. to 9 to 10 ft., or 75 to 100 8 to 9 ft. to 9 to 10 ft. Combination deliveries accepted.

USE—The horizontal-branching habit of White-flowering Dogwood lends itself readily to the horizontal lines of modern architecture of our modern homes.

MEMBERS—American Association of Nurserymen
Ohio Association of Nurserymen.

We are not in a beetle area.

References upon request.

WADE & GATTON NURSERIES

BELLVILLE, O.

Phones: Butler 2-3835, 2-3874
Long distance: Butler 2-3191

References: Dun & Bradstreet
By Mail: Bellville, O.

OHIO ASSOCIATION

[Continued from page 11]

of customers, because, although they did not realize it, the colors were making them uncomfortable.

Also on the subject of salesmanship, it was noted that the nurseryman should make his customers feel important, treat them courteously and respectfully, give them equal value for money spent, and question the customer so as to sell him the right product or service for his specific situation.

Professor McIntyre pointed out that advertisements should be carefully composed and noted some of the facts to consider. They should sell ideas such as the enjoyment of working outdoors or that working with plants can be a wonderful hobby. Simple descriptive words and illustrations are most effective. Even though results of research have indicated that people think of quality first, service second and price third, price should be included in the advertisement to prevent embarrassment to the customer. Advertisements should be longer than wide, because this follows the form of the paper, fits the normal reading habits of people and is actually easier to read. They should not appear crowded, and the use of white space adds the sparkle and attraction necessary on a page full of type. Great importance was placed on the use of honest and truthful advertising, for false advertising not only hurts the individual business, but can also be detrimental to the whole industry.

Sources for advertising were then discussed, and it was noted that newspaper advertisements would sell merchandise faster and at a lower cost than other types, provided the newspaper was one that many people read. Classified advertisements should be used with the addition of more expensive display advertisements during and preceding the peak selling periods.

The fact that the average person only receives two and one-quarter pieces of mail per day indicates that direct mail advertising can be effective, particularly when it concerns a particular product of interest to a specific group.

Calendar advertising is good, provided these requirements are met: It has 12 leaves or at least six; it can be read from 10 feet away, and the preceding and following months are on the same leaf as the current month.

Professor McIntyre concluded his talk by again stressing the importance of truthful advertising, be-



Juniperus Glauca
Hetzi
12 to 15 ins., 3-yr.



Ilex Crenata Convexa
8 to 10 ins. and 10 to 12 ins.



Chamaecyparis
Plumosa Aurea
8 to 10 ins., 3-yr.

FIELD-GROWN LINING-OUT STOCK

All stock grown in open field beds.

	Each	Each		Each	Each			
	per	per		per	per			
	100	1000		100	1000			
<i>Abelia grandiflora</i> .			<i>Juniper, Andorra (Purple</i>					
1-yr., T. br.	\$0.25	\$0.22	<i>Andorra Juniper).</i>					
<i>Azalea Ghent (pontica).</i>			6 to 8 ins., 1-yr., T.	\$0.28	\$0.25			
3 to 5 ins., 3-yr., T.	.28	.25	8 to 10 ins., 2-yr., T.	.35	.32			
5 to 8 ins., 3-yr., T.	.35	.32	10 to 12 ins., 3-yr., T.	.45	.42			
8 to 10 ins., 4-yr., T.	.55	.50	<i>Juniperus canadensis aurea</i>					
<i>Azalea kaempferi (Torch</i>			<i>(Golden Canadian Juniper).</i>					
<i>Azalea).</i> Mixed colors.			4 to 8 ins., 1-yr., T.	.25	...			
2-yr., T. field bed.	.28	.25	<i>Juniperus communis hibernica</i>					
6 to 10 ins., 3-yr., T.	.38	.35	<i>(Irish Juniper)</i>					
<i>Azalea mollis (Chinese Azalea).</i>			10 to 12 ins., 2-yr., T.	.40	.38			
6 to 8 ins., 2-yr., T.	.25	.22	12 to 15 ins., 3-yr., T.	.45	.42			
8 to 10 ins., 3-yr., T.	.45	.42	cut back.	.45	.42			
10 to 12 ins., 4-yr., T.	.65	.60	15 to 18 ins., 3-yr., T.	.55	.50			
12 to 15 ins., 4-yr., T.	1.35	...	<i>Juniperus communis fastigiata</i>					
<i>Azalea schlippenbachii.</i>			<i>(Compact Irish Juniper).</i>					
2-yr., field bed, T.	.28	.25	10 to 12 ins., 2-yr., T.	.42	.40			
<i>Buxus sempervirens welleri.</i>			12 to 15 ins., 3-yr., T.	.48	.45			
4 to 6 ins., 2-yr., T.	.28	.25	15 to 18 ins., 3-yr., T.	.55	.50			
6 to 8 ins., 2-yr., T.	.35	.32	<i>Juniperus glauca hetzi.</i>					
8 to 10 ins., 3-yr., T.	.45	...	8 to 10 ins., 2-yr., T.	.35	.32			
<i>Chamaecyparis lawsoniana allumi.</i>			10 to 12 ins., 3-yr., T.	.45	.42			
Columnar, blue.			12 to 15 ins., 4-yr., T.	.55	.50			
6 to 8 ins., 1-yr., T.	.25	.22	15 to 18 ins., 4-yr., T.	.70	...			
8 to 10 ins., 1-yr., T.	.30	.28	<i>Juniperus horizontalis glauca.</i>					
<i>Chamaecyparis lawsoniana aurea</i>			8 to 10 ins., 2-yr., T.	.35	.32			
<i>(Golden Lawson Cypress).</i>			<i>Juniperus pfitzeriana aurea.</i>					
10 to 12 ins., 3-yr., T.	.45	.42	6 to 8 ins., 1-yr., T.	.30	.28			
12 to 15 ins., 3-yr., T.	.55	.50						
<i>Chamaecyparis plumosa aurea.</i>			<i>Juniperus squamata meyeri.</i>					
6 to 8 ins., 2-yr., T.	.35	.32	5 to 8 ins., 2-yr., T.	.35	...			
8 to 10 ins., 3-yr., T.	.45	.40	8 to 10 ins., 2-yr., T.	.45	...			
<i>Chamaecyparis squarrosa.</i> Mossy,			<i>Juniperus stricta (Spiny</i>					
green foliage.			<i>Greek Juniper).</i>					
5 to 8 ins., 1-yr., T.	.30	.28	3 to 6 ins., 1-yr., T.	.28	.26			
<i>Chamaecyparis thyoides.</i>			6 to 8 ins., 2-yr., T.	.35	.32			
6 to 8 ins., 1-yr., T.	.25	.23	<i>Juniperus virginiana (Red Cedar).</i>					
<i>Euonymus fortunei carrierei.</i>			8 to 10 ins., 3-yr., T.	.15	...			
6 to 8 ins., 1-yr., T.	.22	.20	10 to 15 ins., 3-yr., T.	.20	...			
8 to 10 ins., 2-yr., T.	.30	.28	<i>Koeleruteria paniculata.</i>					
10 to 15 ins., 3-yr., T.	.35	.32	8 to 12 ins., 3-yr., T.	.18	.16			
<i>Euonymus fortunei erectus.</i>			12 to 18 ins., 3-yr., T.	.22	.20			
10 to 12 ins., 2-yr., T.	.28	.25	18 to 24 ins., 3-yr., T.	.30	.28			
12 to 15 ins., 3-yr., T.	.35	.32	<i>Larix europaea (European Larch).</i>					
15 to 18 ins., 4-yr., T.	.45	...	10 to 18 ins., 3-yr., T.	.18	.15			
<i>Euonymus patens.</i>			18 to 24 ins., 4-yr., T.	.25	.20			
10 to 15 ins.	.55	...	<i>Leucothoe catesbaei.</i>					
15 to 18 ins.	1.00	...	6 to 8 ins., 2-yr., T.	.28	.25			
<i>Euonymus radicans coloratus.</i>			8 to 10 ins., 3-yr., T.	.35	.32			
8 to 10 ins., 2-yr., T.	.22	.20	10 to 12 ins., 3-yr., T.	.45	...			
10 to 15 ins., 2-yr., T.	.28	.26	<i>Mahonia aquifolium (Oregon</i>					
<i>Euonymus radicans vegetus.</i>			<i>Grape-Holly).</i>					
8 to 10 ins., 2-yr., T.	.25	.23	3 to 5 ins., 2-yr., T.	.18	.16			
10 to 12 ins., 3-yr., T.	.35	.32	5 to 8 ins., 3-yr., T.	.25	.22			
12 to 15 ins., 4-yr., T.	.45	...	8 to 10 ins., 3-yr., T.	.30	.28			
<i>Hex crenata (Japanese Holly).</i>			<i>Picea excelsa (Norway Spruce).</i>					
6 to 8 ins., 1-yr., T.	.25	.23	10 to 12 ins., 4-yr., T.	.20	.18			
8 to 10 ins., 2-yr., T.	.35	.32	12 to 15 ins., 4-yr., T.	.25	.22			
<i>Hex crenata convexa (bullata).</i>			<i>Pteris floribunda.</i>					
6 to 8 ins., 1-yr., T.	.25	.23	6 to 8 ins., 3-yr., T.	.35	.32			
8 to 10 ins., 3-yr., T.	.45	.40	<i>Pteris Japonica.</i>					
10 to 12 ins., 3-yr., T.	.70	...	5 to 8 ins., 3-yr., T.	.32	.30			
<i>Hex crenata helleri.</i>			8 to 10 ins., 3-yr., T.	.45	.42			
1-yr., field bed, T.	.18	.16	10 to 12 ins., 4-yr., T.	.65	...			
<i>Hex rotundifolia (Roundleaf</i>			12 to 15 ins., 4-yr., T.	.90	...			
<i>Japanese Holly).</i>			<i>Pinus mugo (Dwarf Mugo Pine)</i>					
6 to 8 ins., 1-yr., T.	.30	.28	4 to 6 ins., 3-yr., T.	.18	.16			
8 to 10 ins., 2-yr., T.	.45	.40	6 to 8 ins., 4-yr., T.	.22	.20			
10 to 12 ins., 3-yr., T.	.55	.50						

Write for our complete price list.

PALLACK BROS. NURSERIES, INC.

Phone: Zelienople 789 (or 644 evenings)

(We are not open Sundays)

(31 mi. north of Pittsburgh, Pa., on Rt. 19)
R. D. 1, HARMONY, PA.

FINISHED NURSERY STOCK

Priced in the Ground. Each

Customer Digs per

10

Tsuga canadensis (Hemlock).

3 to 4 ft. \$2.50

4 to 5 ft. 3.25

5 to 6 ft. 3.75

Taxus capitata (Upright Yew).

3 to 4 ft. 6.00

4 to 5 ft. 9.50

Thuja occidentalis

(American Arborvitae).

5 to 6 ft. 3.00

6 to 7 ft. 3.75

7 to 8 ft. 4.50

8 to 10 ft. 5.25

Lining-out Stock

25 at the 100 Rate.

300 at the 1000 Rate.

TERMS: Cash with order—free packing; otherwise 1/3 deposit with order and balance C.O.D. and packing at cost. All shipments by railway express.

now a safe WEED KILLER

for
nursery
seedlings



ALANAP-1[®]

Guard your nursery plantings with Alanap-1. It's Naugatuck's remarkable new selective weed killer that has proved itself nationwide.

Spray Alanap-1 after transplanting and annual weeds are killed as they start to sprout. Hand-weeding costs are largely eliminated!

What's more, where Alanap-1 is sprayed, the nursery plantings in most cases are actually bigger and healthier.

One application gives excellent control of weeds from 3 to 8 weeks, even after heavy rains. Also, Alanap-1 is non-hazardous to humans or animals.

Order Alanap-1 from your local supplier today. Write, wire or phone us if unable to locate immediate source of supply.



Naugatuck Chemical

Division of United States Rubber Company
Naugatuck, Connecticut

producers of seed protectants, fungicides, miticides, insecticides, growth retardants, herbicides: Spergon, Phygon, Aramite, Synklor, MH, Alanap, Durasel.



cause false advertising will not only hurt the individual nurseryman, but will also be a black mark against the entire industry, as some recent court cases have illustrated.

A. A. N. Activities

Curtis Porterfield, administrative assistant, American Association of Nurserymen, Washington, D. C., discussed the nationwide activities of the nursery industry.

Mr. Porterfield pointed out the many ways in which the national trade association is combating and conditioning the outcome of problems in the industry.

The national association is combating moves to permit the importation of plants established in peat moss under quarantine 37. Although the peat moss may be sterile, there may be spores, nematodes or other contaminating factors present on the plants. Other agricultural groups, realizing the potential danger of such a move, are supporting the association's protest.

The market development and publicity program of the association is being carried out with increasing effectiveness. The industrial landscape award contest is now in its second year, with 54 entries being received, from which 24 awards were made. Mr. Porterfield indicated that the "Plant America" program is progressing and that Ohio has set the pace for the rest of the country.

Mr. Porterfield concluded by pointing direct services to members of the national association such as the group insurance plan, the legislative report service, the merchandising bulletin and the news-letter.

Portable Irrigation

Thursday afternoon, Robert J. McCall, New-Way Farm Sales, Columbus, discussed the layout of portable nursery irrigation systems and some of the problems connected with them.

Mr. McCall first listed and discussed some of the considerations to use in purchasing equipment.

(1) The source and availability of water is of prime importance. Most irrigation water is being taken from streams with the use of wells becoming increasingly more important. Approximately 27,154 gallons of water are required to irrigate one acre with one inch of water. Theoretically an acre pond four feet deep is sufficient to irrigate eight acres.

(2) The soil type, texture, structure and depth should be considered. This would help to determine the amount of water to apply at one time and the number of times to irrigate.



Growing . . . since '98

BURR

C. R. Burr & Co., Inc.

LANDSCAPE MATERIAL REASONABLY PRICED

An exceptional growing year with heavier-than-average rainfall has brought us an outstanding harvest. This enables us to quote most attractive prices on many items.

A partial list of top-quality varieties is listed below—many of them are in short supply. We invite your want lists for prompt quotations.

Extra-heavy, 3 to 4-ft. Shrubs

Red Branch Dogwood
Forsythia
Hydrangea
Honeysuckle
Mock Orange

Bridal Wreath
Coralberry
European Cranberry
Tamarix
Weigela

Heavy, 2 to 3-ft. Shrubs

French Hybrid Lilacs
Beauty Bush

Rose of Sharon
Pink-flowering Almond

Choice Dwarf and Semidwarf

Shrubs, 18 to 24 ins.

Variegated Dogwood
Gold Mock Orange
Spiraea Anthony Waterer

Novelty Items

Rosa Hugonis
Rosa Rugosa
Variegated Weigela

Ornamental Trees

Golden Chain
White Birch
Weeping Japanese Cherry
Prunus Thundercloud
Flowering Cherry

C. R. Burr & Co., Inc.

for a fast, friendly reply, write today to

MANCHESTER, CONNECTICUT or TELEPHONE MITCHELL 3-4161

Roses • Shrubs • Shade Trees • Fruit Trees • Evergreens

SEEDLINGS

	Per 100	Per 1000
Acer palmatum		
1-yr., 2 to 4 ins.....	\$4.00	\$35.00
Red Barberry (Pa. only)		
1-yr., 6 to 12 ins.....	8.00	50.00
Colorado Blue Spruce		
2-yr., 2 to 3 ins.....	2.50	12.50
2-yr., 3 to 6 ins.....	4.00	25.00
3-yr., 5 to 7 ins.....	6.00	35.00
3-yr., 7 to 9 ins.....	7.00	45.00
Norway Spruce		
2-yr., 2 to 3 ins.....	2.50	12.50
2-yr., 3 to 7 ins.....	4.00	25.00
Douglas Blue Fir		
2-yr., 2 to 3 ins.....	3.00	15.00
2-yr., 3 to 6 ins.....	4.50	30.00
500 plants take 1000 rate. For less than 500, add 10% for Parcel Post.		

FIELD-GROWN

	25 rate each	100 rate each
Colorado Spruce		
(<i>Picea pungens</i>)		
9 to 12 ins., B.R.....	\$0.65	\$0.50
12 to 15 ins., B.R.....	.80	.65
12 to 15 ins., B&B.....	1.00	.85
15 to 18 ins., B&B.....	1.40	1.25
18 to 24 ins., B&B.....	1.60	1.45
24 to 30 ins., B&B.....	2.00	1.75

50 at 100 rate. Nursery pickup only on B&B stock. Bare-root trees, packed in moss.

GRAFTED
JAPANESE RED MAPLES

Bare-root, packed in moss.	Each
9 to 12 ins.....	\$2.75
12 to 15 ins.....	3.00
For B&B or potted stock (pickup only) add 25c each.	

Miscellaneous Items

Euonymus erectus , 8 to 12 ins.....	Each 15c
Euonymus japonica , 8 to 12 ins.....	18c

	1-yr. Rooted Cuttings Per 100	Trans- plants Per 100
Arborvitae, globosa ...	\$ 9.00	\$20.00
Arborvitae, woodwardi ..	9.00	20.00
Arborvitae, elegantissima	10.00	22.00
Arborvitae, pyramidal ..	9.00	18.00
Juniper, Pfitzer	10.00	22.00
Juniper, glauca hetzi ...	9.00	20.00
Juniper, Andorra	9.00	20.00
Juniper, sabina	9.00	20.00
Taxus cuspidata	9.00	16.00
Taxus capitata	10.00	18.00
Ilex crenata hetzi	14.00	....
200 of a variety 10% discount. Bare root, packed in moss.		

GORTON'S NURSERY

R. D. No. 1 HARBORCREEK, PA.
(Nursery located 8 1/4 miles east of Erie, Pa., on U. S. Hwy. No. 5.)

Whereas, a clay soil may tend to puddle with a certain amount of water, a sandy soil may dry out too quickly with the same amount.

(3) The root depth of the crop is important, because inadequate amounts of water would be detrimental to deep-rooted crops.

(4) Consideration should be given to the amount of water lost by evaporation from the soil and transpiration by the plants.

(5) In purchasing a pump, the amount of pressure head should be determined. Calculations must be made of pressure necessary to raise water to higher elevation, of the pressure drop in the main line as well as in the lateral lines, and of pressure drop through the fittings. Mr. McCall indicated that there should be no more than an 8 1/2-pound pressure drop in 1,000 feet of main line and no more than a 20 per cent drop in the laterals. He also noted that a 5-inch pipe will carry twice as much water as a 4-inch pipe.

(6) When setting up and spacing individual sprinklers prevailing winds are a consideration. The laterals are usually located perpendicular to the prevailing winds, and the sprinklers are spaced according to the extent of throw and the amount of water applied in that distance. The spacing of Rainbird sprinklers varies with the speed of the wind as follows: (1) No wind—space Rainbirds up to 65 per cent of the diameter of the throw. (2) Six mile per hour wind—space Rainbirds up to 60 per cent of the diameter of the throw. (3) Eight mile per hour wind—space Rainbirds up to 50 per cent of the diameter of the throw. (4) Above eight mile per hour wind—space Rainbirds up to 25 to 30 per cent of the diameter of the throw.

Mr. McCall went on to point out that too heavy a stream of water from a sprinkler may damage the crop or the soil, whereas too fine a mist will be subject to excessive wind drift.

The previous factors illustrate some of the reasons for purchasing an entire system rather than purchasing parts from various sources and thereby having a haphazard set-up. It was noted that the dealer is responsible for designing the set-up, providing instructions and plans, and installing the necessary safety devices. The effectiveness of the system is dependent on the complete cooperation of the nurseryman with the dealer's design and instructions.

Mr. McCall illustrated a typical irrigation set-up and showed that, by different placement of laterals, a system could be operated on 16.8,

MEEHAN
SPECIALTIES
DRESHER-GROWN

	Per 100
Red Maple , 1 1/2 to 2 ft., T.....	\$20.00
Sugar Maple , 1 1/2 to 2 ft., T.....	20.00
Paper Birch , 2 to 3 ft., T.....	25.00
Sweet Gum , 10 to 24 ins., T.....	20.00
Euonymus alatus ,	
6 to 8 ins., T.....	17.50
4 to 6 ins., T.....	7.50
Silver Maple ,	
3 to 4 ft., T.....	22.50
2 to 3 ft., T.....	17.50
1 1/2 to 2 ft., T.....	12.50
Viburnum plicatum , 2-yr., T.....	18.50
Viburnum tomentosum ,	
2-yr., T.....	17.50
1-yr., layers	10.00
Red Oak , 2-yr., S.....	11.50
Scarlet Oak , 2-yr., S.....	16.50
White-flowering Dogwood ,	
1-yr., S., grafting size.....	10.00
10 to 15 ins., 1-yr., S.....	7.50
6 to 10 ins., 1-yr., S.....	5.00
4 to 6 ins., 1-yr., S.....	3.00
Salix babylonica ,	
6 to 7 ft.....	28.50
5 to 6 ft.....	22.50

TRANSPLANTED
BEDDED EVERGREENS

Retinospora plumosa ,	
6 to 8 ins., T.....	20.00
Retinospora plumosa aurea ,	
6 to 8 ins., T.....	20.00
Juniperus pfitzeriana ,	
6 to 7 ins., T.....	25.00

PACKING CHARGES EXTRA

THOMAS B. MEEHAN CO., INC.
DRESHER, PA.

Mention The American Nurseryman when you write.

WHELOCK & TURNBULL, INC.
NORTH COLLINS, N. Y.

Wholesale Growers

Now offering for immediate delivery:

Deutzia lemoinei , 2 to 3 ft., 18 to 24 ins. and 12 to 18 ins.
Deutzia gracilis , 9 to 12 ins.
Hydrangea P. G. , 18 to 24 ins.
Philadelphus virginialis , 18 to 24 ins.

BLUE HYDRANGEA

Gert Glahn , 3 canes, 9 ins. and up
Blue Prince , 3 canes, 9 ins. and up
Domotoi , 3 canes, 6 to 9 ins.
Red Lake Currants , 2-yr. 1 and 1-yr. 1
Wilder Currants , 2-yr. 1 and 1-yr. 1
Weigela Candida , for spring delivery only.

EVERGREEN
SEEDLINGS

Write for Free Price List.
CANALES FOREST NURSERY
SHELOCTA, PA.

DECIDUOUS STOCK

SHRUBS

	Per	Per	Per
	100	1000	10000
ALMOND, PINK			
2 to 3 ft.	\$6.00	\$55.00	
18 to 24 ins.	5.00	45.00	
BARBERRY, THUNBERGI			
2 to 2 1/2 ins.	4.50	40.00	
18 to 24 ins.	3.10	27.00	\$240.00
12 to 15 ins.	2.40	21.00	180.00
BARBERRY, THUNBERGI			
2-yr., 8, 9 to 12 ins.	8.50	75.00	
2-yr., 8, 6 to 9 ins.	4.50	35.00	
BUCKTHORN, DAHURIAN			
2 to 4 ft.	3.50		
2 to 3 ft.	4.00		
18 to 24 ins.	2.90		
CORNUS ALBA SIBIRICA (Red Dogwood)			
2 to 3 ft.	5.50	50.00	
18 to 24 ins.	4.00	35.00	
CORNUS GOLDEN TWIG			
2 to 3 ft.	5.50	50.00	
18 to 24 ins.	4.00	35.00	
12 to 15 ins.	2.40	21.00	
COTONEASTER INTEGRIFOLIA			
18 to 24 ins.	7.50	70.00	
12 to 15 ins.	5.50	50.00	
CYDONIA JAPONICA			
2 to 3 ft.	5.00	45.00	400.00
18 to 24 ins.	3.80	33.00	300.00
12 to 15 ins.	2.90	25.00	
FORSYTHIA INTERMEDIA			
3 to 4 ft.	6.50	60.00	
2 to 3 ft.	5.50	50.00	
18 to 24 ins.	4.40	38.50	350.00
12 to 15 ins.	4.00	35.00	300.00
HONEYSUCKLE, TATARIAN ROSEA, Pink			
4 to 5 ft.	7.00	65.00	
3 to 4 ft.	6.00	55.00	500.00
2 to 3 ft.	5.50	45.00	400.00
18 to 24 ins.	4.00	35.00	300.00
HONEYSUCKLE, TATARIAN RUBRA			
4 to 5 ft.	7.00	65.00	
3 to 4 ft.	6.00	55.00	500.00
2 to 3 ft.	5.00	45.00	400.00
18 to 24 ins.	4.00	35.00	300.00
HYDRANGEA P. G.			
12 to 18 ins.	3.20	28.00	
1 cane, 12 to 24 ins.	3.20	28.00	
HYDRANGEA A. G.			
2 to 3 ft.	5.50	50.00	
18 to 24 ins.	4.50	40.00	
KOLKOWITZIA AMABILIS (Beauty Bush)			
2 to 3 ft.	6.50		
LILAC, PERSIAN PURPLE			
3 to 4 ft.	6.50	60.00	550.00
2 to 3 ft.	5.50	50.00	450.00
18 to 24 ins.	4.50	40.00	350.00
FRENCH LILACS			
Alphonse Lavalee			
2 to 3 ft.	8.50	80.00	
18 to 24 ins.	6.50	60.00	
Belle de Nancy			
2 to 3 ft.	8.50	80.00	
18 to 24 ins.	6.50	60.00	
12 to 15 ins.	4.50	40.00	
Charles Joly			
12 to 18 ins.	4.50	40.00	
Charles X			
18 to 24 ins.	6.50	60.00	
12 to 15 ins.	4.50	40.00	
Michel Buchner			
2 to 3 ft.	8.50	80.00	
whips, 2 to 3 ft.	6.50	60.00	
18 to 24 ins.	6.50	60.00	
6 to 12 ins.	5.00	25.00	
President Grey			
whips, 2 to 3 ft.	6.50	60.00	
18 to 24 ins.	6.50	60.00	
12 to 15 ins.	4.50	40.00	
Vauban			
2 to 3 ft.	8.50	80.00	
whips, 2 to 3 ft.	6.50	60.00	
18 to 24 ins.	6.50	60.00	
PHILADELPHUS GLACIER			
2 to 4 ft.	6.50		
2 to 3 ft.	5.00	45.00	
18 to 24 ins.	4.00	35.00	
12 to 15 ins.	3.50	30.00	
PHILADELPHUS LEMONEI			
18 to 24 ins.	4.50	40.00	
12 to 15 ins.	3.20	28.00	
PRIVET, AMUR RIVER			
2 to 3 ft., 4 canes.	21.00	180.00	
2 to 3 ft., 2 canes.	16.50	140.00	
18 to 24 ins., 3 canes.	16.50	140.00	
RHUS CANADENSIS			
3 to 4 ft.	8.00		
2 to 3 ft.	6.50		
18 to 24 ins.	5.50		
SPIRAEA ANTHONY WATERER			
15 to 18 ins.	5.00	45.00	
12 to 15 ins.	4.00	35.00	
SPIRAEA ARGUTA			
3 to 4 ft.	6.00		
2 to 3 ft.	5.00	45.00	
SPIRAEA BILLIARDI			
3 to 4 ft.	6.50	60.00	
2 to 3 ft.	5.00	45.00	400.00
18 to 24 ins.	4.00	35.00	300.00
SPIRAEA FRAXINIFOLIA			
18 to 24 ins.	4.00	35.00	
15 to 18 ins.	3.50	30.00	
SPIRAEA THUNBERGI			
18 to 24 ins.	4.50	40.00	350.00
15 to 18 ins.	3.50	30.00	
SPIRAEA VANHOUTTEI			
3 to 4 ft.	5.00	45.00	
2 to 3 ft.	4.00	35.00	300.00
18 to 24 ins.	3.20	28.00	
TAMARIX HISPIDA			
3 to 4 ft.	5.50	50.00	450.00
2 to 3 ft.	5.00	45.00	400.00

VIBURNUM AMERICANA

	Per	Per	Per
	100	1000	10000
(American Highbush)			
10 to 12 ins.	\$4.00	\$35.00	\$320.00
6 to 12 ins.	2.50	20.00	
VIBURNUM LANTANA			
2 to 3 ft.	5.50	50.00	
18 to 24 ins.	4.50	40.00	
12 to 18 ins.	3.50	30.00	
VIBURNUM LENTAGO			
2 to 3 ft.	5.50	50.00	
18 to 24 ins.	4.50	40.00	
12 to 18 ins.	3.50	30.00	
VIBURNUM OPULUS			
18 to 24 ins.	5.00	45.00	400.00
12 to 18 ins.	3.50	30.00	

FOREST SEEDLINGS

	Per	Per	Per
	100	1000	10000
ASH, GREEN			
2 to 3 ft.	3.50	30.00	\$45.00
18 to 24 ins.	2.50	20.00	
12 to 18 ins.	1.60	15.00	
6 to 12 ins.	1.20	10.00	
BOX ELDER			
2 to 3 ft.	3.50	30.00	
18 to 24 ins.	2.50	20.00	
6 to 12 ins.	1.20	10.00	
BUCKTHORN, DAHURIAN			
2 to 3 ft.	5.00	45.00	
18 to 24 ins.	4.00	35.00	
6 to 12 ins.	2.50	20.00	
4 to 6 ins.	1.50	10.00	
CARAGANA ARBORESCENS			
2 to 4 ft.	8.00	75.00	
2 to 3 ft.	5.50	50.00	
18 to 24 ins.	4.00	35.00	
12 to 18 ins.	3.00	25.00	
6 to 12 ins.	2.00	15.00	
CHERY, WILD BLACK			
2 to 3 ft.	5.50	50.00	
18 to 25 ins.	4.00	35.00	
12 to 18 ins.	2.90	25.00	
6 to 12 ins.	2.00	18.00	
CORNUS STOLONIFERA (Red Osier Dogwood)			
6 to 9 ins.	2.50	20.00	
4 to 6 ins.	2.00	15.00	
CORYLUS AMERICANA			
2 to 3 ft.	6.50		
18 to 24 ins.	5.00	45.00	
CORNUS PANICULATA			
2 to 3 ft.	6.00		
18 to 24 ins.	5.00		
12 to 18 ins.	4.00		
9 to 12 ins.	3.00		
6 to 12 ins.	2.50		
ELM, AMERICAN			
2 to 3 ft.	3.50	30.00	
18 to 24 ins.	2.50	22.00	
12 to 18 ins.	1.90	16.00	
6 to 12 ins.	1.20	10.00	
ELM, CHINESE			
3 to 4 ft.	7.50	65.00	
2 to 3 ft.	4.50	40.00	
18 to 24 ins.	2.90	25.00	
12 to 18 ins.	2.10	18.00	
6 to 12 ins.	1.20	10.00	
HONEYSUCKLE			
18 to 24 ins.	11.00	100.00	
12 to 18 ins.	7.50	65.00	
6 to 9 ins.	3.50	30.00	
LOCUST, THORNLESS HONEY			
Very fine stock, 100 per cent thornless, excellent lining-out and understock material.			
3 to 4 ft.	8.00	70.00	
2 to 3 ft.	5.00	45.00	
18 to 24 ins.	3.50	30.00	
12 to 18 ins.	2.40	20.00	
6 to 12 ins.	1.70	14.00	
3/16-in. cal. and up understocks	2.00	18.00	
OAK, BUE			
18 to 24 ins.	11.00	100.00	
12 to 18 ins.	7.50	70.00	
9 to 12 ins.	6.50	60.00	
6 to 9 ins.	5.00	45.00	
4 to 6 ins.	2.50	20.00	
OAK, PIN			
2 to 3 ft.	15.00	140.00	
18 to 24 ins.	12.00	110.00	
12 to 18 ins.	8.50	80.00	
9 to 12 ins.	7.50	65.00	
6 to 9 ins.	5.50	50.00	
4 to 6 ins.	3.00	25.00	
OAK, RED			
2 to 3 ft.	15.00		
18 to 24 ins.	12.00		
12 to 18 ins.	8.50		
9 to 12 ins.	7.00		
6 to 9 ins.	5.50		
4 to 6 ins.	3.50		
OAK, WHITE			
18 to 24 ins.	11.00		
12 to 18 ins.	8.00		
9 to 12 ins.	7.00		
6 to 9 ins.	5.50		
OLIVE, RUSSIAN			
3 to 4 ft.	8.00	75.00	
2 to 3 ft.	6.00	55.00	
18 to 24 ins.	4.50	40.00	
12 to 18 ins.	3.00	25.00	
6 to 12 ins.	2.00	18.00	
OSAGE ORANGE			
18 to 24 ins.	2.40	20.00	
12 to 18 ins.	1.80	15.00	
6 to 12 ins.	1.20	10.00	

FOREST SEEDLINGS (Cont.)

	Per	Per	Per
	100	1000	10000
PHYSOCARPUS OPULIFOLIUS			
18 to 24 ins.	\$6.00	\$55.00	
12 to 18 ins.	5.00	45.00	
6 to 12 ins.	3.50	30.00	
PRUNUS BESSEYI (Western Sand Cherry)			
2 to 3 ft.	6.50	60.00	
18 to 24 ins.	5.50	50.00	
12 to 18 ins.	4.50	40.00	
6 to 9 ins.	2.90	15.00	
PRUNUS PADUS COMMUTATA (Mayday)			
12 to 18 ins.	5.50	50.00	
6 to 12 ins.	4.00	35.00	
4 to 6 ins.	3.00	25.00	
RIBES ODORATUM			
2 to 3 ft.	6.50	60.00	
18 to 24 ins.	5.50	45.00	
12 to 18 ins.	4.50	35.00	
6 to 9 ins.	3.00	25.00	
4 to 6 ins.	2.00	15.00	
ROSA MULTIFLORA, thorny			
1/4-in. cal. and up	3.50	30.00	
No. 1, 3/16 to 1/4-in. cal.	2.50	22.00	
No. 2, 2/16 to 3/16-in. cal.	2.00	15.00	
8 to 15 ins.	1.50	12.00	
6 to 10 ins.	1.20	10.00	
ROSA, HANSEN			
1/4-in. cal.	2.50	22.00	
2/16 to 3/16-in. cal.	2.00	15.00	
TAMARIX HISPIDA			
2 yr., cutbacks, 24 to 36 ins.	20.00	150.00	
VIBURNUM OPULUS			
18 to 24 ins.	12.00		
12 to 18 ins.	10.00		
9 to 12 ins.	9.00		
6 to 9 ins.	7.00		
WALNUT, BLACK			
12 to 18 ins.	3.50	30.00	
6 to 12 ins.	2.50	20.00	
AMPELOPSIS VEITCHI (Boston Ivy)			
1-yr., approx. 2 1/2 to 16 ins., planter	3.50	30.00	

SHADE TREES

	Per 10	Per 100	Per 1000
COTTONWOOD, MARILANDICA			
5 to 8 ft.	\$10.00	\$90.00	
5 to 6 ft.	6.50	60.00	
4 to 5 ft.	4.50	40.00	
3 to 4 ft.	3.50	30.00	
2 to 3 ft.	2.50	22.00	
18 to 24 ins.	1.65	15.00	
COTTONWOOD, MISSOURIENSIS			
1-yr. whips			
8 to 10 ft., whips	10.00	90.00	
8 to 8 ft., whips	6.50	60.00	
5 to 6 ft., whips	4.50	40.00	
4 to 5 ft., whips	3.50	30.00	
3 to 4 ft., whips	2.50	22.00	
2 to 3 ft., whips	1.65	15.00	
CRAB APPLE, RED SILVER			
5 to 6 ft.	15.00	135.00	
4 to 5 ft.	12.00	110.00	
3 to 4 ft.	8.50	80.00	
ELM, AMERICAN			
1 1/2-in. cal.	33.00		
1 1/4-in. cal.	22.00	200.00	
8 to 10 ft.	16.50	150.00	
6 to 8 ft.	11.00	100.00	
5 to 6 ft.	7.00	65.00	
4 to 5 ft.	5.00		
3 to 4 ft.	3.00	25.00	
LINDEN, AMERICAN			
6 to 8 ft.	22.00	200.00	
5 to 6 ft.	12.00	110.00	
4 to 5 ft.	9.00	85.00	
3 to 4 ft.	6.50		
2 to 3 ft.	4.00		
LINDEN, REDMOND			
4 to 5 ft.	11.00	90.00	
3 to 4 ft.	8.50	75.00	
2 to 3 ft.	6.00	50.00	
OAK, RED			
5 to 6 ft.	10.00	175.00	
4 to 5 ft.	14.00	125.00	
3 to 4 ft.	3.00	25.00	
POPLAR, LOMBARDY			
1 1/2-in. cal.	10.00		
1 1/4-in. cal.	7.00	65.00	
8 to 10 ft.	6.00	55.00	\$500.00
6 to 8 ft.	4.50	40.00	
5 to 6 ft.	3.20	28.00	220.00
4 to 5 ft.	2.50	21.00	190.00
3 to 4 ft.	2.00	17.00	150.00
2 to 3 ft.	1.50	10.00	
PRUNUS PADUS COMMUTATA (Mayday)			
4 to 5 ft.	11.00		
3 to 4 ft.	8.00		
2 to 3 ft.	5.50		
PRUNUS JAPONICA			
3 to 4 ft.	9.00		
2 to 3 ft.	6.50		
PRUNUS TOMENTOSA (Nanking Cherry)			
4 to 5 ft.	11.00		
3 to 4 ft.	8.00		
2 to 3 ft.	5.50		
PRUNUS TRILOBA			
4 to 5 ft.	14.00		
3 to 4 ft.	11.00		
RED CEDAR			
3 to 4 ft.	8.50	80.00	
2 to 3 ft.	5.50	50.00	



MALLOW or HARDY HIBISCUS ANNIE J. HEMMING

Plant Patent 835

A beautiful, luminous red Mallow, selected for its rich color, overlapping petals, dark green foliage, medium size and lack of coarseness. Flowers in June, July and August—even until frost. A single two-year plant bore 250 six to seven-inch flowers in one season. Quite hardy.

Easy to grow and transplant.

An ideal plant for mail-order and garden store business.

2-yr., No. 1 Plants

\$17.50 per 10; \$150.00 per 100; \$1,250.00 per 1000.

Color plate available.

Attractive metal plant patent tag attached to each plant.

EASTERN SHORE NURSERIES, INC.

P. O. Box 743

EASTON, MD.

18.4 or 29 horsepower. He concluded his talk by again stressing the desirability of purchasing a complete irrigation system to obtain the most efficient and effective set-up for a particular situation.

National Arboretum

Dr. Henry T. Skinner, director of the United States National Arboretum, Washington, D. C., discussed the arboretum and some particular plant subjects.

As early as 1907 a move was made to establish a national botanical garden or arboretum, but little progress was made. In 1917 John Watson was appointed head of a committee to work on this problem, but World War I slowed any progress. An act to establish an arboretum was passed by Congress in 1927, and 300 acres had been purchased by 1934. The first real appropriation was not made until 1946, when Congress appropriated \$46,000, which was primarily used for roads. The status of the arboretum at present finds two thirds of the roads completed, few buildings and plantings progressing favorably.

The objectives of the arboretum are to establish an outdoor museum and to promote educational and research programs. The area is not restricted to woody plants only, but these are the only plant types there at present. Some of the outstanding research is concerned with the genetic makeup of the many holly types, and plant testing in order to straighten out the many confused genera, such as the 600 clones of Azalea mollis and the 800 varieties and clones of the evergreen and semievergreen azaleas.

Dr. Skinner then showed some excellent slides of some of the outstanding areas of the arboretum. Near the entrance is a synoptic

GUARANTEED-TO-LIVE TRANSPLANTED EVERGREENS

	Per 1000
American Arborvitae, 4-yr. transplants, (2-2), 4 to 8 in.	\$65.00
Balsam Fir, 4-yr. transplants, (2-2), 4 to 6 in.	65.00
Douglas Fir, 4-yr. transplants, (2-2), 5 to 8 in.	65.00
European Larch, 3-yr. transplants, (2-1), 5 to 12 in.	50.00
Austrian Pine, 4-yr. transplants, (2-2), 5 to 10 in.	65.00
Red Pine, 4-yr. transplants, (2-2), 4 to 10 in.	65.00
Red Pine, 3-yr. transplants, (2-1), 3 to 5 in.	50.00
Scotch Pine, 3-yr. transplants, (2-1), 3 to 7 in.	55.00
Engelmann Blue Spruce, 4-yr. transplants, (2-2), 3 to 5 in.	70.00
Norway Spruce, 5-yr. transplants, (2-3), 6 to 10 in.	70.00
Norway Spruce, 4-yr. transplants, (2-2), 4 to 8 in.	60.00
White Spruce, 3-yr. transplants, (2-1), 3 to 5 in.	50.00

SEEDLINGS

(Not Guaranteed)

Mugho Pine, 3-yr. seedlings, (3-0), 4 to 8 in.	25.00
Red Pine, 3-yr. seedlings, (3-0), 5 to 8 in.	25.00
Black Hill Spruce, 3-yr. seedlings, (3-0), 4 to 10 in.	30.00
Colorado Blue Spruce, 3-yr. seedlings, (3-0), 3 to 5 in.	35.00
White Spruce, 3-yr. seedlings, (3-0), 4 to 8 in.	25.00

TERMS

Cash with order; or one-half cash with order, balance C.O.D. All prices F.O.B. Fryeburg, Maine, net; no discounts. 250 trees of any one kind and size at the 1000 rate. For less than 250 of one kind, ask for retail price list. No extra charge for boxes or packing.

OUR GUARANTEE

90 per cent of all transplants sold at regular wholesale prices as quoted in this list are guaranteed to live. Replacements will be made free of charge for any losses in excess of 10 per cent of the number purchased, provided we are notified of such losses by October 1, 1955. (Seedlings not guaranteed.)

We believe that we grow and ship more transplanted evergreen trees than any other privately owned nursery in the country. Several other varieties of transplants available. Send for complete list of stock.

WESTERN MAINE FOREST NURSERY CO.

DEPT. AN-235

FRYEBURG, MAINE



GREEN BARBERRY

	Per 100	Per 1000	Per 5000
2-yr., S., 6 to 9 ins.	\$ 5.50	\$ 35.00	\$125.00
2-yr., S., 9 to 12 ins.	7.50	50.00	200.00
2-yr., S., 12 to 18 ins.	10.00	70.00	300.00

RED BARBERRY

	5.50	45.00	200.00
2-yr., S., 6 to 9 ins.	5.50	45.00	200.00
2-yr., S., 9 to 12 ins.	7.00	60.00	
2-yr., S., 12 to 24 ins.	14.50	125.00	
3-yr., T., lightweight, 12 to 18 ins.	20.00	175.00	750.00

EVERGREEN SEEDLINGS

Pinus nigra, 2-yr., 4 to 6 ins.	5.00	40.00	175.00
Pinus sylvestris, 2-yr., 4 to 8 ins.	3.50	30.00	137.50

FAIRVIEW EVERGREEN NURSERIES

FAIRVIEW, Erie Co., PA.

LINERS

AT THEIR BEST

2 1/4-in. pots — except where noted. *Bed-grown, shipped bare rooted. All plants are well established. 250 of one variety at 1000 rate.

	Each per 100	Each per 1000
Abelia		
Edward Goucher, 6 to 8 ins.	20c	17 1/2c
Aucuba		
Japonica	17 1/2c	
Variegata	17 1/2c	
Berberis		
Candidula	22 1/2c	20c
Julianae, 6 to 8 ins.	22 1/2c	20c
Triacanthophora	22 1/2c	20c
Chamaecyparis Retinospora		
*Pisifera Crippsi, 6 to 8 ins.	20c	18c
Cotoneaster		
Francheti	20c	18 1/2c
Repens (Horizontalis)	17 1/2c	15c
Salicifolia	20c	18 1/2c
Cryptomeria Japonica Lobbi		
6 to 8 ins.	40c	
8 to 10 ins.	60c	

Deutzia		
Gracilis	15c	10c
Gracilis Rosea	12 1/2c	8c

Elaeagnus		
Pungens	17 1/2c	15c
Fruitlandi	20c	18 1/2c
Euonymus		
Patens Sieboldianus	17 1/2c	15c
Pulchellus	17 1/2c	15c
Radicans Marginatus Albo	15c	12 1/2c

Hedera Helix (English Ivy)	15c	12 1/2c
-----------------------------------	-----	---------

Ilex (Hollies)		
Cassine Angustifolia	20c	
Cassine Myrtifolia	20c	
Cornuta Burfordi	22 1/2c	20c
Cornuta Femina	22 1/2c	20c
Not seedlings		

	Each per 100	Each per 1000
Ilex (continued)		
Crenata Helleri	22 1/2c	20c
Crenata Microphylla	20c	18 1/2c
*Crenata Microphylla, 6 to 8 ins.	22 1/2c	20c
Crenata Rotundifolia	20c	18 1/2c
*Crenata Rotundifolia, 6 to 8 ins.	20c	18 1/2c
*Crenata Rotundifolia, 8 to 10 ins.	35c	32 1/2c
Glabra. Special price on large quantities	20c	18 1/2c
Opaca East Palatka	30c	27 1/2c
Vomitoria	25c	22 1/2c

Juniperus		
Excelsa Stricta	20c	18 1/2c
Squamata Meyeri	22 1/2c	20c
Sylvestris	20c	18 1/2c

Osmanthus		
Aquifolium	20c	18 1/2c
Fortunei	20c	18 1/2c
Fragrans	20c	18 1/2c

Photinia		
Glabra	20c	18 1/2c

Prunus Laurocerasus		
Officinalis (English Laurel)	20c	18c
Schipkaensis	20c	18c

Pyracantha. Nice for container or field planting.		
Gibbsi, orange-red	20c	18 1/2c
Lalandi, orange	20c	18c
Serrata, red	20c	18 1/2c

Thuja (Arborvitae)		
American Nigra Compacta	20c	18 1/2c
*American Nigra Compacta 8 to 10 ins.	25c	22 1/2c
Bakeri	20c	18 1/2c
Biota Bonita	22 1/2c	20c
Biota Bonita Excelsa	22 1/2c	20c
Pyramidalis, 6 to 8 ins.	20c	18 1/2c
Globosa (Woodwardi), 6 to 8 ins.	20c	18 1/2c
*Globosa (Woodwardi) 8 to 10 ins.	25c	22 1/2c



GRESHAM'S NURSERY

Phone: 82-5689 (Day)
82-5680 (Night)

R. F. D. 9
RICHMOND 25, VA.

LINING-OUT STOCK

For Spring, 1955, Delivery

This stock is surplus over our own lining-out requirements. You will find these plants well-established, ready to put to field in the spring, 1955. Samples sent on request.

	Each	Per 100
ACER (Maple)		
250 Acer palmatum atropurpureum dissectum, own-root,		
2 1/2-in. pots	\$0.45	
BERBERIS (Barberry)		
225 Berberis julianae, 2 1/2-in. pots. ....	.20	
TAXUS (Yew)		
2000 Taxus cuspidata, 2 1/4-in. pots. ....	.17	
THUJA (Arborvitae)		
3500 Thuja occidentalis compacta erecta, 2 1/4-in. pots. ....	.17	
VIBURNUM		
800 Viburnum carlesi, 2 1/4-in. pots, own-root. ....	.30	

Prices are F.O.B. Westminster, Md.; packing additional at cost. Usual terms to those of established credit. No goods sent C.O.D. unless 25% of amount is sent with order.

THE WESTMINSTER NURSERIES
WESTMINSTER, MD.

ROSA MULTIFLORA JAPONICA

(Multiflora Rose)

Hardy, northern-grown seedlings. Upright, thorny type for stock-tight living fences, conservation and budding understock. We select our seeds for trueness to type. The plants are excellently grown.

	Per 1000
1 to 2-mm. cal., 8 to 10 ins. in height.	\$10.00
2 to 3-mm. cal., 10 to 15 ins. in height.	12.50
3 to 4-mm. cal., 12 to 15 ins. in height.	15.00
4 to 6-mm. cal., 15 to 24 ins. in height.	25.00
6 to 12-mm. cal., 18 to 36 ins. in height.	35.00
Conservation grade, 3 to 12-mm. cal., 12 to 24 ins.	22.50

Heights are approximate. Sample for \$2.00. Also sold row run by the pound. You do the counting, at very attractive prices. No charge for packing. Shipped cut back to about 8 ins. unless you state otherwise.

Ask for quantity prices.



BROOKVILLE NURSERIES

GLEN HEAD, N. Y.

Nursery-Grown

RED OAKS

2 to 7-in. cal.

and

DOUGLAS FIRS

4 to 20 ft.

Write for prices.

THE BUDDIES NURSERY

P. O. Box 14

BIRDSBORO, PA.

**QUALITY MERCHANDISE
AT REASONABLE PRICES**

**VANDERBROOK
NURSERIES**

MANCHESTER, CONN.

Wholesale Nurserymen Since 1922

GROWERS

EVERGREEN TREE LINING-OUT STOCK

SUNCREST EVERGREEN NURSERIES

P. O. Box 594

JOHNSTOWN, PA.

We never talk about the other fellow's low prices; he knows what his merchandise is worth. We grow good evergreen liners. Ask for our wholesale list.

The STEDMAN NURSERIES

NEWFANE, N. Y.

planting, which includes types of all the plants in the arboretum grouped in family classification.

There are over 300 varieties of crab apples in the arboretum and over 60 forms of dogwood in one of the plantings.

Dr. Skinner extended an invitation to all to visit the arboretum and indicated that it is open to nurserymen and other plantmen the year around and to the general public during the growing season.

Plant Industry Division

The Friday morning session opened with comments by John Barringer, chief, division of plant industry, Ohio department of agriculture.

Discussing the division's work, Mr. Barringer indicated that the Japanese beetle had been one of the major concerns. The beetle infestation began in New Jersey in 1916 and moved westward, reaching serious proportions in Ohio in 1937-38. There are eighteen counties under the Japanese beetle quarantine in Ohio at present, with the others in fairly good condition.

Research Report

John Strate, Ohio State University, outlined the work he had done under the Ohio Nurserymen's Association fellowship in 1954.

Extensive research has been conducted on growing a variety of nursery stock in containers, and results of this work were reported. A soil mixture of one part sand, one part peat moss and one part soil was generally quite good; the addition of Haydite did not improve results significantly. Borax applied at twelve pounds per acre under a 2-inch layer of sand, on which the cans were placed, eliminated all weeds around the cans. Watering once a day gave the best results on plant growth. The significance of winter protection was noted when all unmulched plants died in the winter of 1953-54, whereas the mulched plants survived 100 per cent. Work is being carried on this year, testing different methods of winter protection.

Results of foliar fertilization work led to the conclusion that it should be used only as a supplement to soil fertilization.

In tests of Juniperus virginiana versus Juniperus chinensis hetzi used as understocks, a greater percentage of take was noted with a number of Juniper varieties on J. c. hetzi.

J. C. BRITT recently opened the Evergreen Nursery at Silva, Mo.

FLOWERING SHRUBS

All 18 to 24 ins. and smaller grades tied 25 per bundle. All larger grades tied 10 per bundle. No bundles broken. Cash with order unless credit established with us. Quotations gladly submitted on large quantities.

On U. S. Highway 45-W, 60 miles south of Cairo, Ill.
RIVES, TENNESSEE

Obituary

John O. Williams

John O. Williams, a past president of the Virginia Nurserymen's Association, died January 14, at Richmond, Va. He resided at 3650 Hermitage road and is survived by two married daughters.

Formerly associated with his two brothers, who operate Williams & Harvey Nursery, Richmond, he entered business alone under the name of John O. Williams, 10 years ago.

Mr. Williams was a loyal supporter of the Richmond nurserymen's group, composed of 12 Richmond nurserymen, organized to further customers' relations and to educate the public in the further use of quality nursery stock.

Raymond P. Cook

Raymond P. Cook, owner and operator of Cook's Nursery, Geneva, O., for over 30 years, died at his home January 18 at the age of 76.

Mr. Cook was born on a farm at Geneva. He taught school for five years and later was employed as a traveling salesman. After obtaining a profitable income as a salesman, he started the nursery business in 1924.

Cook's Nursery will carry on business under the same name and will be managed by Mr. Cook's granddaughter and her husband, Pat and Bob Holden. Mrs. Holden has been interested in the nursery business since an early age, when she accompanied Mr. Cook to conventions.

Paul Fisker

Paul A. Fisker, 53, partner in Kent Nursery, Kent, Wash., died January 3, in his home. Mr. Fisker went to Enumclaw, Wash., from his native Denmark in 1924. He moved to Kent and became a partner in the Kent Nursery in 1933.

Surviving him are his widow, Effie; a son, Gary Paul, a student at Washington State College, and a sister and two brothers in Denmark.

Cornelius Faddegon

Cornelius Faddegon, 70, owner and operator of Faddegon's Nursery, Niskayuna, N. Y., for the past 35 years, died suddenly of a heart ailment Christmas day at Ellis hospital, Schenectady.

Mr. Faddegon began his career in the nursery business in his native Holland and worked at the business in England and Scotland before coming to America. He is survived by his widow, a son, a daughter and three grandchildren, all of Niskayuna.

Henry Kuehl

The death of Henry Kuehl, Moline, Ill., January 21, at the age of 90, received notice in newspapers of other states as well as his own because he is reputed to be the man who planted the original Moline elm tree in his front yard in 1903 and started it on its way to popularity.

The report is that Henry Kuehl, an insurance agent and real-estate dealer, found an elm sapling near his home and transplanted it to his yard. A nurseryman, probably the late Charles Klehm, of Arlington Heights, Ill., recognized the value of the tree, about 1916, and grew it

from cuttings in his nursery, beginning to produce the tree on a commercial scale. The tree he first planted is marked with a historical plaque.

CANADIANS MEET

[Continued from page 8]

that the next course be held in Hamilton, Ont.

Reporting as chairman of the advertising and publicity committee Friday morning, Mr. Shuttleworth reviewed the results of the program instituted a year ago. Advertisements appeared in 21 Canadian newspapers during a 16-week campaign from February 6 to May 22. These 28-line advertisements urged the public to buy from members of the association. As part of the program it was planned that association members run "hooker" advertisements. Plaques were sent to members to display at their nursery in a prominent place. A chart was pre-

NORTHERN-GROWN STOCK

LANDSCAPE-SIZE SHRUBS		
	Per 10	Per 100
<i>Clethra alnifolia</i>		
18 to 24 ins., clumps.....	\$4.00	\$35.00
2 to 3 ft., clumps.....	6.00	50.00
3 to 4 ft., clumps.....	8.00	70.00

<i>Ilex verticillata</i>		
2 to 3 ft., clumps.....	6.00	50.00
3 to 4 ft., clumps.....	7.00	60.00
<i>Viburnum cassinoides</i>		
2 to 3 ft., clumps.....	5.00	40.00
3 to 4 ft., clumps.....	7.00	60.00
<i>Viburnum dentatum</i>		
2 to 3 ft., clumps.....	4.50	35.00
3 to 4 ft., clumps.....	6.00	50.00

SUGAR MAPLES		
	Unit price in quantities	
	10 to 50 to	
<i>Acer saccharum</i>	49	250
1 1/4 to 1 1/2-in. cal.....	\$ 4.00	\$ 3.50
1 1/2 to 1 3/4-in. cal.....	6.00	5.00
1 3/4 to 2-in. cal.....	7.00	6.00
2 to 2 1/2-in. cal.....	9.00	8.00
2 1/2 to 3-in. cal.....	12.00	11.00

CLUMP BIRCH		
	Per 10	Per 100
<i>Paper Birch</i>		
5 to 6 ft.,		
3 stems and up.....	\$30.00	
6 to 8 ft.,		
3 stems and up.....	40.00	
<i>Gray Birch</i>		
4 to 6 ft.,		
3 to 6 stems.....	20.00	\$150.00
6 to 8 ft.,		
3 to 6 stems.....	35.00	250.00

PAPER BIRCH		
	Per 100	Per 1000
<i>Betula papyrifera</i>		
2 to 3 ft.....	\$ 8.00	\$ 70.00
3 to 4 ft.....	25.00	200.00
4 to 6 ft.....	40.00	300.00
6 to 8 ft.....	90.00	

LINING-OUT STOCK		
<i>Acer saccharum</i>		
2 to 3 ft.....	12.00	100.00
3 to 4 ft.....	30.00	250.00
4 to 6 ft.....	60.00	500.00

<i>Clethra alnifolia</i>		
6 to 18 ins.....	7.00	60.00

<i>Ilex verticillata</i>		
1 to 2 ft.....	10.00	90.00

<i>Syringa vulgaris</i>		
1 to 2 ft.....	7.00	60.00

<i>Viburnum acerifolium</i>		
6 to 18 ins.....	8.00	70.00

<i>Viburnum cassinoides</i>		
1 to 2 ft.....	8.00	70.00

<i>Viburnum dentatum</i>		
1 to 2 ft.....	8.00	70.00

HEMLOCK TRANSPLANTS		
<i>Tsuga canadensis</i>		
4 to 8 ins., trans., 2-2.	15.00	120.00
8 to 12 ins., trans., 2-2.	20.00	180.00

HEMLOCK SEEDLINGS		
<i>Tsuga canadensis</i>		
6 to 9 ins.....	4.00	20.00
9 to 12 ins.....	6.00	45.00
12 to 18 ins.....	8.00	65.00

All stock is first-quality collected material except as otherwise noted. Send for complete wholesale list of Hardy Native Ferns, Lilies, Orchids, Wild Flowers, Trees, Shrubs and Evergreens. We do not have Japanese beetle.

ISAAC LANGLEY WILLIAMS

P. O. Box 352

EXETER, N. H.

LINING-OUT STOCK

IN WIDE ASSORTMENT

Hardy Azaleas, Pink Dogwood, Jap. Red Maples, Old English Boxwood, Lilacs (French Hyb.), Evergreens, etc., in 1, 2 and 3-yr. transplants, at competitive prices. Write for list.

DEERFIELD NURSERIES

DEERFIELD STREET P. O., N. J.

FOR 52 YEARS

Our business has been growing

Rhododendrons
Azaleas
Perennials, Roses
All Nursery Items

BOBBINK NURSERIES, INC.

586 Paterson Ave.
E. RUTHERFORD, N. J.

Cloverset Farm....



EXPERIMENTAL STATION for

THOUSANDS OF SUCCESSFUL NURSERYMEN!

Nowadays practically everyone realizes that there's more profit in selling potted stock—the question is, which pots to use? Because we want to continue to make the best possible pots, we do a lot of experimenting here in our own cash-and-carry nursery; every new idea, whether or not it comes from inside our own organization, is thoroughly tested through a complete growing and selling period. These years of experience have taught us that a good pot must have these ten features:

- 1 It must last a full year or more in the sales frame.
- 2 Roots must be safely contained within the soil ball so that transplanting may be done at any time.
- 3 It should have a bottom opening adequate for good drainage without waterlogging; no rock or gravel necessary.
- 4 Bottom must be wide enough to prevent blowing over when spaced in frames.
- 5 It should be made in sufficient sizes to accommodate stock of any salable size.
- 6 It should be neat and uniform in appearance, an asset to the sales area.
- 7 And tough enough to permit handling in frame and salesyard.
- 8 Pot should be easy for customer to remove, either at once or a week or even a month after delivery.
- 9 It should be light as possible to reduce freight costs, yet fill these requirements.
- 10 It must be sufficiently low in price that it may be given away with the plant.

Only the new Cloverset Pots fill all ten requirements.

TABS FOLDED IN AT FACTORY; READY TO USE



105th & WORNALL RD.
KANSAS CITY 14, MO.

• EXCLUSIVE EASTERN DISTRIBUTOR
Moorestown Gardens, Inc.,
Moorestown, Burlington Co., N. J.

MAIL
THIS
COUPON
FOR
SAMPLES,
PRICES
AND
COMPLETE
INFORMATION

CLOVERSET FARM, Dept. A
105th & Wornall Rd., Kansas City 14, Mo.

ALL SENT
POSTPAID

Please send items checked. I enclose _____ c.

☐ Sample set of 5 pots at 50c (limit one set).

☐ Prices and complete information about pots, potting aids and advertising helps.

Name _____

Firm _____

Address _____

City _____ Zone _____ State _____

Grafted Stock for Spring, 1955, Delivery

Grafts are normally ready for shipment after April 15. Since there is a possibility of damage by late spring frost, kindly give a shipping date when you feel it is safe to plant without frost injury.

	Per 10	Per 100
<i>Acer palmatum atropurpureum</i>	\$7.50	\$45.00
<i>Acer saccharum monumentale</i>	7.50	45.00
<i>Cedrus atlantica glauca</i>	7.50	45.00
<i>Cornus florida alba plena</i>	6.00	50.00
<i>Cornus florida rubra</i>	6.00	50.00
<i>Cornus florida rubra Prosser</i>	7.50	45.00
<i>Hamamelis mollis</i>	6.00	50.00
<i>Hamamelis vernalis</i>	6.00	50.00
<i>Juniperus chinensis columnaris glauca</i>	6.00	50.00
<i>Juniperus chinensis columnaris viridis</i>	6.00	50.00
<i>Juniperus chinensis keteleeri</i>	6.00	50.00
<i>Juniperus chinensis neoborlensis</i>	6.00	50.00
<i>Juniperus chinensis sargentii</i>	6.00	50.00
<i>Juniperus chinensis sargentii glauca</i>	6.00	50.00
<i>Juniperus sabina vonehron</i>	6.00	50.00
<i>Juniperus squamata mayeri</i>	6.00	50.00
<i>Juniperus virginiana burki</i>	6.00	50.00
<i>Juniperus virginiana canescens</i>	6.00	50.00
<i>Juniperus virginiana elegantissima</i>	6.00	50.00
<i>Juniperus virginiana glauca</i>	6.00	50.00
<i>Juniperus virginiana kosteriana</i>	6.00	50.00
<i>Juniperus virginiana pyramidiformis hillii</i>	6.00	50.00
<i>Juniperus virginiana schottii</i>	6.00	50.00
<i>Magnolia cordata</i>	7.50	45.00
<i>Magnolia rustica rubra</i>	7.00	40.00
<i>Magnolia sieboldii parviflora</i>	7.00	40.00
<i>Magnolia soulangeana</i>	7.00	40.00
<i>Magnolia soulangeana nigra</i>	7.00	40.00
<i>Magnolia stellata</i>	7.00	40.00
<i>Magnolia stellata rubra</i>	7.50	45.00
<i>Magnolia stellata Water Lily</i>	6.50	40.00
<i>Parrotia persica</i>	6.50	40.00
* <i>Pinus cembra</i>	6.50	55.00
<i>Thuja occidentalis douglasii spiralis</i>	5.00	40.00
<i>Thuja occidentalis elegantissima</i>	5.00	40.00
<i>Thuja occidentalis lutea George Peabody</i>	5.00	40.00
<i>Thuja occidentalis lutea Mary Corey</i>	5.00	40.00
<i>Thuja occidentalis nigra</i>	5.00	40.00
<i>Thuja occidentalis pyramidalis</i>	5.00	40.00
<i>Thuja occidentalis rosenthalii</i>	5.00	40.00
<i>Thuja occidentalis warsana (sibirica)</i>	5.00	40.00
<i>Thuja orientalis aurea nana</i>	5.00	40.00
<i>Thuja orientalis conspicua</i>	5.00	40.00
<i>Thuja orientalis elegantissima</i>	5.00	40.00
<i>Tsuga canadensis pendula</i>	6.00	50.00

*Five-needle pines cannot be shipped in the following states: Arizona, California, Colorado, Georgia, Kentucky, New Mexico, Nevada, South Carolina and Tennessee.

DUE TO HANDLING COSTS, ORDERS FOR LESS THAN \$5.00 CANNOT BE ACCEPTED.

TERMS

Prices in this list are net cash F.O.B. Mountain View, N. J., but the usual terms will be extended to those of established credit. No goods sent C.O.D. unless 25 per cent of amount is sent with order. Five of one kind will be billed at the 10 rate; 25 at the 100 rate; 250 at the 1000 rate. From those not acquainted with our stock, a trial order will be appreciated. Packing extra at cost.

CHLOROMONE

The latest in rooting agents. Root your Ilex in one third the time.

1-oz. trial bottle	\$ 1.50 plus postage
4-oz. bottle	3.00 plus postage
Case of 12 4-oz. bottles	21.60 plus postage

HESS' NURSERIES

MOUNTAIN VIEW, N. J.

PACHYSANDRA

The ideal permanent evergreen ground cover plant for shady and semishaded areas in all climates.

	Per 100 Prepaid	Per 1000 F.O.B. here	Per 1000 for 10,000 or more in same shipment
Strong, well-rooted, 1-yr. plants; propagated in soil frames	\$4.25	\$35.00	\$32.50
2 to 3-yr., field plants	6.00	50.00	45.00

All available for prompt shipment March through November. Shipments anywhere, including Canada. Good packing free. Order now for spring.

PEEKSKILL NURSERY Phone: Lakeland 8-5595 **SHRUB OAK, N. Y.**

TAXUS MEDIA HALLORAN

Past winters have proved this variety to be very well adapted for the middle western climate. We have 1, 2 and 3-year liners to offer.

VERKADE'S NURSERIES

NEW LONDON, CONN.

sented with figures for each province, the totals revealing that \$3,100 was spent on the advertising program, with 55 of the 171 members using hooker advertisements and membership dues for the year amounting to \$4,000.

Virus-free Cherry Budwood

While the annual business meeting took place, Thursday morning, an education session was scheduled for growers.

The development of virus-free cherry budwood was discussed by G. H. Berkeley, Canada department of agriculture, St. Catharines, Ont. He related that the disease in cherry trees has been spreading naturally in Canada. It becomes apparent in spring, he said, when the buds unfold. At first the tree receives a great shock, but recovers in about six weeks. The leaves fall, but then come back. Many nurserymen take buds from trees not knowing they are infected, he reported, for it is necessary to see the trees in the shock stage to know they contain virus. In three nurseries 30 trees in each were examined and 28, 27 and 4 of the trees in each nursery were infected. A crop can be reduced by 20 to 50 per cent if the trees are infected, he warned.

There is no known cure for the disease, he said; rather, preventive measures are taken by setting out virus-free stock. Mr. Berkeley believed nurserymen should establish virus-free blocks.

Virus-free cherry budwood is available at the Vineland experimental farm, he announced. Montmorancy sour cherry stock has been available for three years, and now Lambert, Schmidt, Napoleon, Black Tartarian, Bing and Deacon are available among the sweet cherries. Hedelfinger and Windsor will be available in 1956. Careful work is being done to index trees, and virus-free seedlings of Mahaleb and Mazzard will soon be available, he added. If the nursery industry avails itself of the virus-free budwood, it can give growers virus-free stock, he concluded.

Propagating Clematis

Propagation of clematis was discussed by C. M. Barron, Barron's, Fonthill, Ont. Cuttings are taken in March and are rooted in a medium of half sand and half vermiculite. About five cuttings can be taken from a shoot, as only one eye is required. The cuttings have to be taken at the right time, when the wood on the plant is semihard. Particular care is needed with white

HEAVY-GRADE ROSEBUSHES ARE IN SHORT SUPPLY

THESE STANDARDS AND PATENTEDS AVAILABLE NOW!

RED

Ami Quinard—No. 1 and XXX
Better Times—No. 1 and XXX
Hollande—No. 1 and XXX
Grenoble—No. 1 and XXX
Grootendorst Supreme—No. 1 and XXX
McGredy's Scarlet—No. 1 and XXX
Poinsettia—No. 1
Red Radiance—No. 1 and XXX
Red Talisman—No. 1 and XXX
Rouge Mallerin—No. 1 and XXX

PINK

Betty Uprichard—No. 1 and XXX
Briarcliff—No. 1 and XXX
The Doctor—No. 1 and XXX
Editor McFarland—No. 1 and XXX
Picture—No. 1
Pink Radiance—No. 1 and XXX

TWO-TONE

Condesa de Santiago—No. 1 and XXX
President Hoover—No. 1 and XXX
Talisman—No. 1 and XXX

WHITE

Caledonia—No. 1 and XXX
Kaiserin Auguste Viktoria—No. 1 and XXX
Konigin Luise—No. 1 and XXX
White American Beauty—No. 1 and XXX

YELLOW

Eclipse—No. 1 and XXX
Golden Charm—No. 1 and XXX
Luxembourg—No. 1 and XXX
Sœur Therese—No. 1 and XXX
Yellow Condesa—No. 1 and XXX

CLIMBERS

Blaze—No. 1 and XXX
Cl. Better Times—No. 1 and XXX
Cl. Hollande—No. 1
Cl. New Dawn—No. 1 and XXX
Cl. Poinsettia—No. 1 and XXX
Cl. Red American Beauty—No. 1 and XXX
Cl. Red Talisman—No. 1
Cl. Talisman—No. 1 and XXX
Cl. White American Beauty—No. 1 and XXX
Paul's Scarlet—No. 1

FLORIBUNDAS AND POLYANTHAS

Golden Salmon—No. 1 and XXX
Baby Chateau—No. 1 and XXX
Else Poulsen—No. 1 and XXX
Ideal—No. 1 and XXX
Red Lafayette—No. 1 and XXX
Red Ripples—No. 1 and XXX

PATENTED

Bravo—Pat. No. 983, No. 1 and 1½
Capistrano—Pat. No. 922, No. 1
Charles Mallerin—Pat. No. 933, No. 1
Chrysler Imperial—Pat. No. 1167, No. 1 and 1½
Confidence—Pat. No. 1192, No. 1 and 1½
Dr. Debat—Pat. No. 961, No. 1 and 1½
Enchantment—Pat. No. 737, No. 1 and 1½
Golden Scepter—Pat. No. 910, No. 1 and 1½
Good News—Pat. No. 426, No. 1 and 1½
Grande Duchesse Charlotte—Pat. No. 774, No. 1
Happiness—Pat. No. 911, No. 1 and 1½
Helen Traubel—Pat. No. 1028, No. 1
Katherine T. Marshall—Pat. No. 607, No. 1 and 1½
Lowell Thomas—Pat. No. 595, No. 1
Mirandy—Pat. No. 632, No. 1 and 1½
Mission Bells—Pat. No. 923, No. 1 and 1½
Nocturne—Pat. No. 713, No. 1 and 1½
Peace—Pat. No. 591, No. 1 and 1½
Pres. Eisenhower—Pat. No. 1217, No. 1
Rex Anderson—Pat. No. 335, No. 1
Rubinynt—Pat. No. 758, No. 1 and 1½
San Fernando—Pat. No. 785, No. 1 and 1½
Show Girl—Pat. No. 646, No. 1 and 1½
Sun Valley—Pat. No. 1135, No. 1 and 1½
Suzon Lotthe—Pat. No. 934, No. 1 and 1½
Symphony—Pat. No. 958, No. 1 and 1½
Cl. Forty-Niner—Pat. No. 792, No. 1
Cl. Goldlocks—Pat. No. 1090, No. 1 and 1½
Cl. Peace—Pat. No. 591, No. 1 and 1½
High Noon—Pat. No. 704, No. 1
Easter Parade—Pat. No. 1200, No. 1 and 1½
Irene of Denmark—Pat. No. 889, No. 1 and 1½

These rosebushes are dug and in mechanical cold storage that is humidity controlled. They are mechanically handled and in best dormant state. Patent bushes are grown under license from patent holders.

Each
 XXX grade55c
 No. 1 grade.....45c

F.O.B. Tyler, Texas. Prices subject to change without notice.

Packed in multiples of 10. Minimum order 100 rosebushes. NO ADDITIONAL CHARGE FOR PACKING!

no. 1 xxx rose- bushes

Sold under our standard terms and conditions: Cash with order or 25% deposit and balance C.O.D. Sold on credit where account has been opened or where time is permitted for investigation.

Write, wire or phone Tyler 2-0122 for quotation on truckload or carload lots.



For complete line of packaged rosebushes and shrubs, write for illustrated catalog.

**CO-OPERATIVE ROSE
GROWERS, INC.
TYLER, TEXAS**

CO-OPERATIVE rose growers, inc.
P. O. BOX 808 TYLER, TEXAS

CHASE SPIRAL TREE WRAP



• Crinkled kraft • Laminated with Asphalt • Varying Widths • Protects against: sun, scald, frost, abrasion, rodents.

CHASE DUPLEX NURSERY SQUARES



• Ready Cut Sheets • Wide range of sizes • Crinkled kraft • Asphalt Laminated • Saves time, money.

CHASE POLYTEX PLASTIC ROSE BAGS



• Fully transparent • Shows off the entire plant • "Buy Appeal" color printing.

Samples and prices on request
ORDER TODAY FROM Nursery Dept.

CHASE BAG COMPANY

General Sales Offices:
309 West Jackson Blvd., Chicago 6, Illinois

varieties, as they root less easily. Cuttings receive 65 degrees of bottom heat and 55 degrees of overhead heat. The cuttings are jammed in real close, and the leaves are not trimmed. Air must be provided without a draft, and shading is necessary so that the cuttings do not receive direct sunlight. The cuttings get black spot on the leaves; so, Mr. Barron said, he picks off the infected leaves each day.

After the cuttings are rooted in four to eight weeks, they are placed in 2½-inch rose pots. The plants are grown on in the greenhouse during the summer and then about November 1 are moved to coldframes. In December the plants are transferred to 4-inch pots and grown on until the middle of March. A temperature of 55 to 60 degrees is maintained.

A mixture of half peat with soil is used for potting, with phosphates being added to the soil. Steam-sterilized soil should be used, he added, for the plants are subject to root knot nematode.

Grafting Demonstrations

A demonstration of grafting fruit trees was presented by H. Rogers, Fonthill Nurseries, Fonthill, Ont. Mr. Rogers passed out specimens of grafts and emphasized using clean stock in the grafting of apple stock. A mild solution of Dreft can be used to wash the understock, and the union can be tied with fine cotton thread, not waxed. Mr. Rogers stated that the grafts are stored by packing in boxes containing a mixture of two-thirds clean pine sawdust and one-third clear sharp sand. The temperature is kept at 36 to 40 degrees for twelve weeks, 2,000 being stored in a box.

Grafting of evergreens was the subject of a talk by C. De Groot, Sheridan Nurseries, Ltd., Clarkson, Ont. He advised using 3/16-inch to 5/16-inch plants for understock. The understock needs a good check, a 24 to 48-hour freeze, before the under heat is turned on. After the stock has grown for a while, watch for disease, he cautioned. A browning on the new growth means juniper disease and should be controlled by spraying.

To graft, a 1¼-inch slit is made on the understock and the scion is inserted, being bound together with a rubber tie. The grafts should be soaked before being placed in the sweatbox, he said, for no water is added afterward. The sweatbox he uses is lined with waterproof paper, and the temperature is run up to 80 degrees. After four weeks the

WILMAT HOLLIES LINERS



2 English Hollies
Male and Female

We have a large assortment of English, Chinese and American hollies such as the ones above, well established for bedding in May. For Climate Zone 5 and part of 4, we recommend:

English hollies	Per 100
<i>altacharensis</i>	\$55.00
<i>belgica</i>	55.00
<i>elliptica major</i>	65.00
<i>handsworthiensis</i>	45.00
<i>shepherdii</i>	55.00
<i>pyramidalis, male</i>	45.00
For Zones 5, 6, 7 and 8:	
<i>alcicornis</i>	45.00
<i>argenteo-marginata</i>	65.00
<i>fisheri</i>	45.00
<i>laurifolia</i>	45.00
<i>marnockii</i>	45.00
<i>robinsoniana, male</i>	45.00
For Zones 5, 6, 7 and 8:	
<i>Ilex cornuta, male and female</i>	50.00
<i>Ilex ciliatopinnosa, male and female</i>	65.00
<i>Ilex opaca variegata, All zones:</i>	
Arden	45.00
Clark	45.00
Cardinal	45.00
Draper	45.00
Selected Heavy Fruiter	65.00

(this is choice)
Quality, variety and livability guaranteed.

WILMAT HOLLY CO.
BOX 304, NARBERTH, PA.

ILEX BULLATA

A very choice, very hardy, low-growing evergreen with shiny, dark green, congested, boxwood-like leaves. Grows fast into money, up to 2 feet, and there slows down. Ultimate size 3 feet high and 4 feet wide. Easier to grow than yews and can be used in sun or shade. Sells on sight. Grows very dense and contrasts well with other evergreens. Makes the perfect low hedge.

6 to 8 ins., T. . . 15c. 8 to 10 ins., T. . . 20c.

PIERIS JAPONICA

The most beautiful broad-leaved evergreen of all. In summer the color of the foliage is always changing, first red, then pale green and then dark green. In August the flower buds form in graceful racemes for next spring's flowers. White Lily-of-the-Valley flowers appear with the first warm weather, and flowers often last 6 weeks. Grows well in sun or shade. Makes a nice contrast with Azaleas and Rhododendrons.

Each
4 to 6 ins., T. . . 15c.
6 to 8 ins., T. . . 20c.

Send for list of other choice plants.

ALANWOLD NURSERY
NESHAMINY, Bucks Co., PA.

SHEPARD NURSERIES

Growers and Distributors of
ORNAMENTAL NURSERY STOCK

Truckloads only, no boxing.
60 acres growing. Skaneateles, N. Y.



write for
FREE
sample
kit



Safeguard

**PRECIOUS, TENDER
PLANT AND SHRUBBERY
ROOT SURVIVAL
IN SHIPMENT**

wrap to Protect with

**Thilco
NURSERY
WRAPS**

Now — scientific wrapper protection is yours with Thilco Nursery Wraps. Designed just for you, they come in a wide selection of grades and types of waterproofness, flexibility and strength to meet your every need and requirement. Whether asphalt, wax, polyethylene or foil treated, Thilco Nursery Wraps are the very finest obtainable . . . anywhere.

Tailor-Made Packaging Papers — Special wraps are also available from Thilco. They can be furnished plain or printed with specific directions for the care and raising of the packaged plant.

Specialty Bags for Unit Packaging — Are also a part of the wide Thilco line. Our bag department is at your service to supply an almost limitless variety of bags in different sizes, papers, weights, duplex papers and applications. They may be punched for ventilation, tin-tied for ease of handling and print-decorated with your trade-mark or sales message.

Decorated Roll or Sheet Wrappings — serve a 101 odd packaging jobs for the florist or nurseryman. Print decorated, they advertise as they protect. Many serve dual roles as wrappers and as a "good will" protective flooring sheet when transferring shrubs and plants to the customer's car.

Plus "PERSONALIZED" IDENTIFICATION
for just a fraction of a cent per unit!

Here's "merchandising appeal" second to none. Any Thilco Nursery Wraps you choose can be furnished print-decorated with your name, trade-mark or any message you wish. The cost is extremely low. For example, the wrapper used by Bobbink & Atkins illustrated above was decorated at a cost of only $\frac{1}{16}$ ¢ per 24"x36" sheet — adequate in size for most wrapping needs. Take advantage of the prestige value, product recognition and attractiveness this decorating provides — Order your wraps "print-decorated".

Thilco

Functional Papers

THILMANT PULP & PAPER COMPANY
KAYKAUNA - WISCONSIN

NEW YORK • CHICAGO • DETROIT • MINNEAPOLIS • CINCINNATI

BIG

We have one of the largest available supplies of big specimen material, including:

TAXUS FASTIGIATA

- HYBRID RHODODENDRON
- TSUGA CANADENSIS
- AZALEA • GINKGO BILOBA
- ILEX BUXIFOLIA
- ILEX OPACA
- TAXUS REPANDENS
- TAXUS CUSPIDATA

For 37 years
one of America's
leading nurseries



7817 York Road
Towson 4, Md.

NURSERIES
Cockeysville, Md.

HARDY NATIVE EVERGREENS

Collected Stock

Canadian Hemlock, American
Arboretum, Balsam Fir

	Per 100	Per 1000
2 to 4 ins., S.....	\$1.00	\$ 5.00
3 to 6 ins., S.....	2.00	10.00
6 to 9 ins., S.....	3.00	20.00
9 to 12 ins., S.....	7.00	45.00
12 to 18 ins., S.....	9.00	70.00

All first-quality stock, well rooted and packed in sphagnum moss.

Send for trade list.

Cash, please.

R. M. COLE

Box 37 CHARLOTTE, VT.

LILACS ON OWN ROOTS

Leading varieties. All sizes, 3 to 8 ft. 4000, all transplanted.

RED LAKE CURRANTS

Assortment of Large-size Plants
for Landscape Planting

Having sold land, will clear this fall.
Inspection and Correspondence Invited.

SAMUEL FRASER NURSERY

Box 158
Geneseo, N. Y.

BOULEVARD NURSERIES

Newport, R. I.

- Quality Nursery Stock
- Lining-Out Stock
- Root-Thru Plant Pots

understock is trimmed, and a second trim is made after eight weeks. The plants are kept in the greenhouse until May and then planted in the field. Irrigation is done before and after planting.

The latest on mist propagation was discussed by L. Hancock, Woodland Nurseries, Cooksville, Ont., concluding the morning's talks. He optimistically pointed out that great strides have recently been made and will be made in mist propagation. The electronic leaf introduced at the plant propagators' meeting in Cleveland, O., this year has helped to root cuttings that have never been rooted before. Mr. Hancock said he looks for continued advancement in propagation of nursery stock.

Trees for City Streets

Thursday afternoon the nurserymen were treated to a well-rounded discussion on trees, commenced by a talk by Edward H. Scanlon, former commissioner of shade trees at Cleveland, O. In eight years Mr. Scanlon supervised the planting of 32,000 trees on the streets of Cleveland and was responsible for the removal of thousands more.

Trees should be planted to give utmost satisfaction, he said. It is a crime to plant unsightly trees on city streets, for they eventually will have to be removed. Much of this type of planting has been sentimental, he believes, and not business-like. Trees on city streets today are for ornamental purposes and not for shade. Mr. Scanlon showed colored slides of trees which he had planted in the Cleveland area.

In Cleveland it costs \$300,000 to \$350,000 per year to remove trees, he related. Raised sidewalks, causing injury to older people, cost the city \$75,000 to \$100,000 per year in lawsuits, he added. Mr. Scanlon advocated the use of smaller trees and believes that there are different species of trees to fit all situations.

The minimum spacing for city street planting should be 50 feet, although he prefers 55 feet. It is a great fallacy, he affirmed, that one tree should be planted in front of each house. Flowering trees can be used to good advantage on city streets, he said. To determine whether certain trees will survive a climate, they have to be tried in number, with not too much emphasis being given to the first-year results, he stated.

Following Mr. Scanlon's talk trees in the urban landscape was discussed by Austin Floyd, landscape architect, Toronto, Ont. People

KOSTER NURSERY

Division of Seabrook Farms

BRIDGETON, N. J.

We are offering exceptionally fine liners this year. Check lining-out stock on page 29 of our Catalog.

Wholesale Nurserymen

SHADE TREES**Nursery-Grown**

We have available some of the Best Grown Trees in the East, in large quantities.

QUERCUS palustris, 3 to 3½-in. and 4 to 5-in. cal.
GLEDITSIA triacanthos, 3 to 3½-in., 4 to 5-in., 5 to 6-in. and 6 to 8-in. cal.
PLATANUS acerifolia, 2 to 2½-in., 2½ to 3-in. and 3 to 3½-in. cal.
ACER platanoides, 2 to 2½-in. and 4 to 5-in. cal.
PINUS nigra, 4 to 5 ft. and 5 to 6 ft.
PINUS resinosa, 8 to 10 ft., 10 to 12 ft. and 12 to 14 ft.
PINUS strobus, 8 to 10 ft., 10 to 12 ft. and 12 to 14 ft.
MALUS in variety, 6 to 8 ft. and 8 to 10 ft.
FRENCH HYBRID LILAC, 4 to 5 ft.
TAXUS hicksii, 18 to 24 ins.

For quotations mail us your Want List
Your Inspection Invited

NORLEY NURSERIES

GARDINER, NEW YORK
Telephone: New Paltz 2596

ORNAMENTAL EVERGREENS**Trees and Shrubs****BAGATELLE NURSERY**

P. O. Huntington Station, N. Y.

DEL-MAR-VA NURSERIES

Growers of Quality
Taxus, Ilex and other Ornamentals.
Ask for list.

DEL-MAR-VA NURSERIES
LINCOLN, DEL.

Phone: Milford, Delaware 4445

Malathion controls:

Aphids
 Spider mites
 Whitefly
 Mealybugs
 Thrips
 Japanese beetle adult
 Four-lined leaf bug
 Tarnished plant bug
 Rose leafhopper
 Potato leafhopper
 Soft brown scale
 Monterey pine scale
 Black scale crawlers
 Pine needle scale
 Oyster shell scale
 Juniper scale
 Fletcher scale
 Bagworms
 Oak kermes
 Scurfy scale
 Florida red scale
 Azalea scale
 Magnolia scale
 Pine leaf scale
 Euonymus scale
 Birch leafminer
 European pine shoot moth
 Tent caterpillar
 Lace bugs

Now!
for practically all
your insect problems
... one insecticide

MALATHION*

Called "one of the safest insecticides to handle" by the USDA, malathion is the first phosphate insecticide to combine high insect toxicity with low mammalian toxicity. Compatible with most other spray materials.

You profit 2 ways

- 1... by simplifying your own insect control problems.
 - 2... by selling malathion insecticides to your customers...
- for malathion will solve practically all *their* garden insect problems.

Write today for complete information on use of malathion on ornamentals. Ask for MALATHION GROWER'S HANDBOOK.

Consult your regular sources of supply for malathion insecticides, packaged by well-known manufacturers under their own brand names. Or write us for suppliers' names.

AMERICAN *Cyanamid* COMPANY

Developers and Producers of Malathion Technical
 AGRICULTURAL CHEMICALS DIVISION
 30 Rockefeller Plaza, New York 20, N. Y.

P.S. Malathion kills flies, too!

usually want trees that will grow as fast as possible, but 25 to 30-foot trees will stay alive longer, he counseled. In his business, Mr. Floyd points out the advantages of trees, the cool shade and air circulation they provide. So that the red and silver maple would not be lost from the urban landscape, Mr. Floyd posed the question whether these trees could be grafted on harder stock to prevent the large growth.

A. Buckley, Central experimental farm, Ottawa, Ont., discussed ornamental trees at the Dominion Arboretum. The arboretum at Ottawa, he said, was founded in 1890 with the express purpose of collecting plants from all over the world to test them for hardiness and usefulness. Mr. Buckley expressed surprise that more nurserymen do not call on the arboretum for assistance.

Observations of a city arborist were provided by G. A. McNair, city arborist, Hamilton, Ont. The silver maple and American elm are the two trees with which the city of Hamilton has the most trouble, he related. Trees are needed which will not disrupt sidewalks, clog sewers or injure power lines. He expressed the belief that it is better to remove a bad planting of trees before they cause trouble. One of the most wasteful acts, he believes, is the destruction of topsoil, for it cannot be replaced without removal from some other place.

F. E. Martin, Cedarvale Tree Experts, Ltd., Toronto, Ont., talked on what tree nurseries should grow. Many nurserymen produce fast-growing trees for a quick return on their money, he said, selling more Norway maple trees than any other variety. In Montreal nothing but Norway maple is being planted, which is a grave mistake, he opined, for a planting of one variety can be destroyed by disease.

Friday morning, films were shown on the operation of the Gill soil pulverizer and the Bolens Ridemaster tractors.

Insect Pests

Acquainting the nurseymen with the insect picture in Canada, Dr. H. B. Goble, Ontario provincial entomologist, Guelph, Ont., related that 223 nurseries are registered in the province of Ontario, which is a considerable increase from previous years. The fruit grower, he related, has three complaints — the pear leaf blister mite, controlled by a dormant spray of lime-sulphur; the bud moth (on apple trees), controlled by spraying with malathion or parathion the last week in July,

and the peach-tree borer, controlled with a DDT spray applied about July 24 and August 11 at ground level.

Oyster-shell scale, he said, can be treated with a DDT spray during the first part of June. Black cherry aphid particularly affects sweet cherries, and a dormant spray can be used. Malathion wettable powder has worked to good advantage, he reported.

Switching to ornamentals, Dr. Goble said there still is not an insecticide which will not injure certain ornamentals, but DDT and malathion come the closest. Using a combination of DDT and malathion, he suggested spraying about the middle of May, the first week in June and the first week in July. But, he warned, certain ornamentals cannot take malathion. If a nurseryman sprayed for juniper scale last year, he suggested repeating the treatment again, as a small amount of infestation will remain. A malathion spray at the end of May

and the first part of July, when the scales hatch, is recommended.

There is an indication that nurserymen might encounter considerable trouble with juniper webworm next spring, he warned. DDT and parathion can be used effectively, he advised, as soon as the weather warms up.

Another insect to watch for is taxus weevil, which can be treated with dieldrin. The beetles come out at the end of June, and the ground should be sprayed with the insecticide at that time.

Workmen's Compensation

Serving as chairman of the afternoon session on Friday, Mr. Luke introduced A. J. Robinson, of the workman's compensation board, Toronto, Ont. Mr. Robinson stated that the act was not compulsory to nurserymen and their employees, but was inexpensive insurance. The assessment for the nursery industry is 75 cents per \$100 of payroll, with a maximum assessment on a salary

EVERGREENS

for Spring, 1955



Grafts,

Liners, 1 and 2-yr. beds

Finished Stock, B&B

Ask for Special List

THE PAUL OFFENBERG NURSERY CO.

COLUMBUS 13, O.

Order early to avoid disappointment.

GROUND COVER PLANTS

	Per 100	Per 1000
<i>Pachysandra terminalis</i> , assorted, field-grown.....	\$ 6.00	\$ 50.00
<i>Pachysandra terminalis</i> , 2 1/4-in., pot-grown.....	10.00	90.00
<i>Hedera helix</i> (English Ivy), 2 1/4-in., pot-grown.....	11.50	100.00
<i>Vinca minor</i> (Periwinkle), 2 1/4-in., pot-grown.....	12.00	110.00

No charge for packing.

HANSEN BROS. NURSERIES, INC.
(Formerly Hugh B. Barclay)

NARBERTH, PA.

EVERGREENS SEEDLINGS AND TRANSPLANTS

Free Price List and Planting Guide.

FLICKINGER'S NURSERY

Box 6

Sagamore, Pa.

PRIVET and BERBERIS Splendid Stock

Write for Special Quotations

LESTER C. LOVETT

MILFORD

DELAWARE

HEDGE PLANTS — ASPARAGUS

For Immediate or Later Delivery, as Desired

LIGUSTRUM ovalifolium (California Privet)	Per 10	Per 100	Per 1000
9 to 12 ins., 2 canes or more.....	\$0.85	\$ 7.00	\$ 55.00
12 to 18 ins., 3 canes or more.....	1.20	10.00	80.00
18 to 24 ins., 3 canes or more.....	1.40	12.50	95.00
2 to 3 ft., 4 canes or more.....	1.85	16.00	145.00
3 to 4 ft., 5 canes or more.....	2.75	22.50	200.00

LIGUSTRUM ovalifolium variegatum (Golden Privet)	Per 10	Per 100	Per 1000
18 to 24 ins., 3 canes or more.....	7.00	60.00	.....
2 to 3 ft., 4 canes or more.....	8.50	75.00	.....

LIGUSTRUM ibolium (Ibolium Privet)	Per 10	Per 100	Per 1000
9 to 12 ins., 2 canes or more.....	.85	7.00	60.00
12 to 18 ins., 3 canes or more.....	1.20	10.00	90.00
18 to 24 ins., 3 canes or more.....	1.40	12.50	105.00
2 to 3 ft., 4 canes or more.....	1.85	16.00	145.00

LIGUSTRUM ibota (Border Privet)	Per 10	Per 100	Per 1000
18 to 24 ins., 3 canes or more.....	3.50	30.00	.....
2 to 3 ft., 4 canes or more.....	4.50	40.00	.....
3 to 4 ft., 6 canes or more.....	5.50	50.00	.....

LIGUSTRUM ibota regelianum (Regel Privet)	Per 10	Per 100	Per 1000
12 to 18 ins., 3 canes or more.....	3.50	30.00	.....
18 to 24 ins., 3 canes or more.....	4.50	40.00	.....
2 to 2 1/2 ft., 3 canes or more.....	5.50	50.00	.....

We are the largest growers of asparagus roots in America. The continued increase in demand for our roots is ample proof of our customers' satisfaction. Our asparagus has made a very good growth again this season, and test digging from various farms indicates the crowns will average better in quality than ever before.

Mary Washington Asparagus

	Per 25	Per 100	Per 250	Per 1000
3-yr., No. 1	\$1.25	\$4.00	\$8.75	\$30.00
2-yr., No. 1	1.00	3.00	5.75	20.00
1-yr., No. 1 .....	.75	2.50	4.25	14.00

Write for special prices on quantity lots of these items. We can quote even more attractive prices than those specified in this advertisement to buyers interested in large quantities.

FREE PACKING FOR CASH WITH ORDER. Our regular Wholesale List offers a complete line of nursery stock. If you failed to receive your copy, write us today. When requesting wholesale rates, kindly use your printed stationery indicating you are entitled to trade prices.

BUNTINGS' NURSERIES, INC.

Box 3

SELBYVILLE, DEL.

of \$4,000. There is a higher rate of \$3 per \$100 for tree surgeons. If an employer wishes to be included, he can specify any amount between \$1,200 and \$4,000 and be assessed on that sum.

Regarding the benefits, he said, it is necessary to report an accident within three days. All medical bills will be paid and up to 75 per cent of an employee's salary will be paid, or a maximum of \$3,000 per year. For permanent disability a person is paid in the form of a pension for life. For death a pension is paid to the widow for life or until remarried. If an employer is covered by the act, he said, an employee cannot sue the employer for damages.

How to Sell Stock

Tips on how to sell nursery stock was the theme of the last session on Friday afternoon. Mr. Torgeson gave an agent's point of view, explaining the cash collection in advance system which he originated. It is necessary to deliver fast-growing stock and not get cancellations on orders, meaning that the stock will have to be carried over.

At a low cost salesmen can be bonded and can accept cash deposits with orders. Currently, said Mr. Torgeson, his salesmen will not accept orders unless 25 per cent of the

HOLLIES

One of the most complete collections of the better named evergreen hollies in the country.

American English Chinese Japanese

Available in 3 to 6-inch pots. Send for Trade List.

ANGELICA NURSERIES

Growers of fine plants

R. D. I MOHNTON, PA.

order is collected in advance. With this payment in advance, the customer gets a 5 per cent bonus of nursery stock. His salesmen are averaging 50 per cent payment in advance, Mr. Torgeson reported. To make certain all orders are turned in, there is wording on the order blank requesting the customer to complain to the home office if an acknowledgment is not received in 10 days.

Mr. Torgeson said it is a problem to make salesmen more efficient, so they can earn enough in commissions to remain with the company. Refresher courses, the study of books and the constant checking of sales material are all necessary to improve the salesmen's efficiency.

Clarence Vanderbrook, research

EVERGREENS

300 acres of choice Evergreens ready for immediate resale

Write for list.

GARDNER'S NURSERIES, Inc.

ROCKY HILL, CONN.

QUALITY LINERS

Dwarf Mt. (Mugho) Pine	Per 100
3 to 5 ins., T., 4-yr.....	\$12.50
Canadian Hemlock	
4 to 8 ins., transplants.....	17.50
Colorado Blue Spruce	
5 to 10 ins., transplants.....	20.00
Pink-flowering Dogwood	
6 to 10 ins., 1-yr. grafts.....	65.00
10 to 15 ins., 1-yr. grafts.....	75.00

Send for new Spring List.

POSSUM HOLLOW NURSERIES

6327 Magnolia St.
PHILADELPHIA 44, PA.

NORTHERN COLLECTED EVERGREENS FERNS

PLANTS

SHRUBS

WILLIAM CROSBY HORSFORD
CHARLOTTE, VT.

SPRING SPECIALS

Euonymus fortunei vegetus, 3 and 4-yr., B.R. Add 25c each B&B. Heavy, well-trimmed specimens.

	Each 1 to 9	Each 10 to 49	Each 50 to 249
9 to 12 ins.....	\$1.50	\$1.25	\$1.00
12 to 15 ins.....	1.75	1.50	1.25
15 to 18 ins.....	2.00	1.75	1.50
18 to 24 ins.....	2.50	2.25	2.00

Berberis thunbergii atropurpurea, well-branched, 2-yr., heavy, not transplanted.

	Per 100	Per 1000
Liners, 6 ins.....	\$ 7.50	\$ 50.00
6 to 9 ins.....	10.00	75.00
9 to 12 ins.....	12.50	100.00
12 to 15 ins.....	15.00	125.00

Rosa multiflora japonica, thorny, 1-yr. Conservation Grade

	Per 1000	Per 10,000
6 ins. and up....	\$20.00	\$16.00 per 1000
9 ins. and up....	25.00	20.00 per 1000
12 ins. and up....	30.00	25.00 per 1000
15 ins. and up....	35.00	30.00 per 1000

Write for new Trade List which includes shrubs, roses, evergreens, ornamentals and fruits.

BROWN BROTHERS CO.
EAST ROCHESTER, N. Y.



PRINCETON NURSERIES

A very complete line of
Quality Ornamental Stock.

Come to see us.

Send us your Want List.

Write for catalog.

PRINCETON NURSERIES

Ph. Princeton 1-1776 PRINCETON, N. J.

PINE SPRUCE-FIR SEEDLINGS and TRANSPLANTS

Write for New Spring List.
Prices as low as \$12.50 per 1000

ECCLES NURSERIES
RIMERSBURG, PA.

Trees, Evergreens, Shrubs Fruit Trees

Write for Our Wholesale Trade List
W. - T. Smith Corporation.
Telephone 2659 GENEVA, N. Y.

director, nursery division, Commercial Enterprises, Inc., Newark, N. Y., gave much helpful advice on how to sell more nursery stock. He related that he advises his salesmen not to sell or talk about one plant. Rather they should sell ideas and talk about the association of plants. All of the training of salesmen is done along visual selling lines.

Mr. Vanderbrook said that his company starts training its salesmen as simply as possible. After a few days of training they are taken out into the field. First the salesmen are taught four types of shrubs—entrance, underwindow, facer and corner shrubs. There are six types in each category, he added. The salesmen are given confidence and told that anyone who can draw a line can draw a landscape plan.

The first six weeks is the critical period in a salesman's life. If he survives this, the salesman is then given a refresher course. To boost his morale and give him confidence, a model of a house and model shrubs and trees are arranged according to a landscape plan drawn by the salesman. At a later refresher course the salesman is shown pictures of plantings designed a year or two previous by a new salesman.

Usually two calls are made on a prospect. The first is a permission call to make a sketch, pointing out how the house can be beautified. Then an appointment is made to see both the husband and wife together. Salesmen are instructed to stick to the point and be brief.

In a final refresher course, the salesmen are advised of the five cardinal rules of good landscape design—focalization, harmony of lines, simplicity, proportion and balance, each being explained.

Salesyard Operation

Concluding the discussion on selling more nursery stock was a talk on sales station selling by Frank Mennes, Menno S. Mennes Nurseries, North Tonawanda, N. Y. He said a nursery sales station should be run like a supermarket. The material should be set out neatly and be easily accessible. There is a problem of running the sales station the year round and making it pay. There is a slump the first two or three months of the year. But, he added, this is the time to check on necessities, make up labels, make alterations, etc.

About the middle of March, Mr. Mennes starts potting up roses, soaking them thoroughly and placing them in beds, out of which they are sold. The potting mixture he prefers

READY NOW

	Per 100	Per 1000
<i>Berberis thunbergii atropurpurea</i> .		
S., 2-yr., 9 to 12 ins.....	\$ 8.00	\$ 60.00
S., 2-yr., 12 to 15 ins.....	12.50	100.00
T., 2-yr., 9 to 12 ins.....	10.00	75.00
T., 2-yr., 12 to 15 ins.....	15.00	125.00
T., 2-yr., 15 to 18 ins.....	25.00	200.00

<i>Cornus florida</i> .		
S., 1-yr., grafting size....	7.50	50.00
S., 1-yr., below grafting.	5.00	40.00

<i>Ampelopsis veitchii</i> (Boston Ivy)		
S., 1-yr., No. 1.....	7.50	60.00
S., 1-yr., No. 2.....	5.00	35.00

<i>California Privet</i>		
1-yr., R.C.	5.00	45.00
2-yr., R.C.	7.50	60.00

Free packing for cash with order.

BROUWER'S NURSERIES

Box 25 NEW LONDON, CONN.

SPRING DELIVERY

Choice Stock

	Per 100
10 <i>Acer Platanoides Drummondii</i> , 6 to 8 ft.	\$600.00
25 <i>Azalea Canadensis</i> , 18 to 24 ins.	250.00
10 <i>Cherry, Kwansan</i> , 6 to 8 ft.	475.00
10 <i>Cherry, Mt. Fuji</i> , 6 to 8 ft.	475.00
100 <i>Cladrasia Lutea</i> , 2 ft., XX.	75.00
100 <i>Dogwood, Pink</i> , 2 to 3 ft.	225.00
100 <i>Euonymus Alatus Compactus</i> , 2 ft.	150.00
50 <i>Hornbeam, Fastigiata</i> , 3 to 4 ft.	475.00
50 <i>Laburnum Vossii</i> , 6 to 8 ft.	550.00
40 <i>Laburnum Vossii</i> , 5 to 6 ft.	475.00
25 <i>Magnolia Lenzii Alba</i> , 2 to 4 ft.	400.00
100 <i>Mahonia Aquifolium</i> , 12 to 15 ins.	65.00
50 <i>Prunus Amanogawa</i> , 6 to 8 ft.	500.00
150 <i>Prunus Subhirtella Pendula</i> , 2-yr., No. 1.	550.00
10 <i>Viburnum Fragrans</i> , 3 to 4 ft.	350.00

Cash with order; 25 at 100 rate.

BRIMFIELD GARDENS NURSERY

245 Brimfield Rd.
WETHERSFIELD 9, CONN.

ORNAMENTALS

TREES SHRUBS EVERGREENS

Wholesale growers of a
general assortment for
the best landscape plantings.

BRYANT'S NURSERIES

Princeton, Illinois

POTTED LINERS SEEDLINGS TRANSPLANTS

Catalog on request.

HEASLEY'S NURSERIES
Freeport Rd. BUTLER, PA.

EVERGREENS

Quality seedlings and transplants for
Christmas trees and forest planting.
Write for spring, 1955, price list.

CLEARFIELD BITUMINOUS COAL CORP.
Department of Forests
INDIANA, Indiana Co., PA.

SHADE'S Central Pennsylvania Grown ROSES

2 years old, field-grown plants

Spring, 1955 — **WHOLESALE PRICE LIST** — Spring, 1955

Place Your Order Now for Spring Delivery

PRICES ON ALL STANDARD ROSES

No. 1...50c EACH No. 1½...40c EACH

RED
CRIMSON GLOBE, Deep velvety and crimson.
AMI QUINARD, Velvety crimson-maroon.
PINK
MME. COCHET-COCHET, Coppery-pink and reflected gold.
BETTY UPRICHARD, Salmon-pink.
WHITE
K. A. VICTORIA, Snowy-white and double.
FLORIBUNDA
POULSEN BEDDER, Clear, rich pink.
CLIMBING ROSES
BLAZE, Bright red.

PATENTED ROSES

We offer these roses under license from patent owner. It is understood and agreed that they are for sale at retail only, at or above prices specified. 10 to 20 of one variety at 10 rate; 20 to 250 of one variety at 100 rate; 250 and up of one variety at 1000 rate. Prices are net.

	Each	Each	per	per
	10	100	10	100
DE. DEBAT Pat. No. 941—Retail \$2.00 each Medium pink.				
No. 1	1.25	1.10	1.00	
No. 1½		.88	.80	
PEACE Pat. No. 991—Retail \$2.50 each Golden-yellow etched with pink.				
No. 1	1.60	1.40	1.25	
No. 1½		1.12	1.00	
PENNSYLVANIA Pat. 936—Retail \$2.00 each Soft apricot—orange—pink.				
No. 1	1.25	1.10	1.00	
No. 1½		.88	.80	

Terms and Conditions of Sale: Cash with order; packing at cost. Please order in multiples of 10 plants only.

(PATENTED ROSES CONT.)

SUZON LOTTE
 Pat. No. 934—Retail \$2.50 each
 Pearly-pink and white.
 No. 1 \$1.60 \$1.40 \$1.25
 No. 1½ 1.12 1.00
COCORICO—Floribunda
 Pat. No. 1193—Retail \$2.00 each
 Flashing scarlet.
 No. 1 1.25 1.10 1.00
 No. 1½88 .80
IRENE OF DENMARK—Floribunda
 Pat. No. 889—Retail \$2.00 each
 White.
 No. 1 1.25 1.10 1.00
 No. 1½88 .80
MRS. INGE POULSEN—Floribunda
 Pat. No. 1050—Retail \$1.50 each
 Pale amber and pink.
 No. 1 1.00 .90 .75
 No. 1½72 .60

WRAPPED ROSES

15c each above cost of individual rose. Attractively packed in distinctive yellow, red and blue waterproof bags, tops paraffine waxed. Beautiful full-color picture label and planting suggestions appear on each bag.

EVERGREENS

Landscape Material
 Twice Transplanted—Regularly Sheared
 No Boxing or Shipping
 Terms: Cash, B&B at the Nursery

	Each
1500 Juniperus Excelsa Stricta 15 to 18 ins.	\$1.50
4000 Juniperus Glaucia Hetzi 15 to 18 ins.	2.25
1200 Taxus Media Hicksi 18 to 24 ins.	3.50
500 Thuja Occidentalis Pyramidalis 36 to 38 ins.	3.00

YOUNG SALABLE EVERGREENS

Grown three years in 15-inch rows planted 15 inches apart, under irrigation. Splendid young salable evergreens for the cash-and-carry trade of garden shops, roadside markets and nurseries.

	Each
1500 Thuja Occidentalis Pyramidalis 30 to 36 ins.	\$2.50
2500 Juniperus Chinensis Pfizeriana 12 to 16 ins.	1.35
1500 Juniperus Excelsa Stricta 12 to 16 ins.	1.25
3000 Juniperus Glaucia Hetzi 12 to 16 ins.	1.25
6000 Taxus Cuspidata 8 to 10 ins.	1.25
5000 Taxus Cusp. Intermedia 8 to 10 ins.	1.25
4000 Taxus Media Hicksi 10 to 12 ins.	1.00
2500 Thuja Occidentalis Elegantisima 18 to 20 ins.	1.50
1500 Thuja Occidentalis Globosa 10 to 12 ins.	1.00
1500 Thuja Occidentalis Wareana 18 to 20 ins.	1.50

SHIPPING—We request customers to give definite shipping instructions regarding manner in which they wish goods shipped. In the absence of special instructions we use our best judgment, but without assuming responsibility. All shipments travel at risk and expense of purchaser.

SHADE'S NURSERY

4907 Orchard St.

Phone—Harrisburg 5-5417

HARRISBURG, PA.

5 Miles East of Harrisburg on U. S. Route 22

Member Pennsylvania Nurserymen's Association — American Rose Society

is one-third to one-half light sandy loam, one-half peat moss and a tablespoon of all-organic fertilizer. Rapid-Gro is added to the roses every two weeks. Mr. Mennes said he urges his salespeople to suggest planting all stock with bone meal and consequently sells a large volume of the fertilizer.

The heeling medium which Mr. Mennes uses in his sales beds is hardwood sawdust. Ammonium phosphate or cyanamide has to be added in summer, and the sawdust is mulched with peat in the middle of summer.

Mr. Mennes places his stock under a lath shade and keeps his sprinklers going practically 18 hours a day. There is a marked tendency for stock to dry out in a salesyard, and he soaks everything before heeling it out.

As the stock is potted up, it can be carried through the summer, he pointed out. But since potted stock deteriorates, a sale is scheduled for summer, being called "two for the

ILEX CRENATA CONVEXA ILEX CRENATA ROTUNDFOLIA

2-yr., transplants
 branched, heavy

	Per 100	Per 1000
6 to 8 ins.	\$25.00	\$22.50
8 to 10 ins.	30.00	27.50

MITISKA NURSERY
 AMHERST, O.

money." Then in the fall, the sales station is restocked.

Committee Chairmen

Committee chairmen elected at the business meeting include Carl Luck, tariff; L. Jansen, public works; D. McConnell, research; J. McDonald, finance; K. F. Stensson, membership; S. McConnell, representative to the Canadian Horticulture Council and nursery stock inspection; A. B. Luke, transportation; L. Cullen, short courses; F. Brady, ex-

HARDY PLANTS Bulbs and Shrubs

"America's Finest"

Write for Trade List

Springbrook Gardens
 MENTOR, O.

TAXUS

Upright, 4 to 14 ft.
 Truckloads only, no boxing.

BULK'S NURSERIES
 BABYLON, L. I., N. Y.

VICARY PRIVET

Lovely golden-leaved variety. Extremely adaptable for a striking border. Retains full golden color from spring to fall. Beautiful for rose bed borders. Should have full sun.

	Per 10	Per 100	Per 1000
Greenhouse cuttings		\$10.00	\$80.00
Liners in 2-in. pots.	\$2.00	18.00	....

BEARDSLEE NURSERY PERRY,



VIBURNUM LANTANA

good, fill-in shrub

- very hardy
- transplants well
- fast growing
- good texture

Strong, 2-yr. seedlings

	Per 100	Per 1000
6 to 12 ins.	\$10.00	\$ 85.00
12 to 18 ins.	15.00	125.00
18 to 24 ins.	17.50	150.00

NEWPORT NURSERY CO.
NEWPORT, MICH.

hibitions; W. Hoist, entertainment and registration; F. Fidler, bylaws; A. Fitzsimmons, cooperative buying; E. Banting, trade prices; J. H. Eddy, sales tax and plant patents; N. J. Scott, education, and J. E. Shuttleworth, publicity.

Entertainment at the convention included a president's reception Thursday evening, after which many of the nurserymen and their wives went to Buffalo, N. Y., for evening entertainment. The annual banquet concluded convention activities. After the presentation of gavels to past and honorary presidents, some delightful entertainment concluded the evening.

WESTERN NEW YORK

[Concluded from page 20]

be taken for several years from such an isolation planting; however, it is advisable to set up new isolation blocks each year. Dr. Brasc emphasized that by following the program recommended by the experiment station the grower is eligible for a certificate of inspection.

Henry B. Little, of the New York bureau of plant industry, told of the work of his department during the past year and cautioned the nurserymen of problems which might pose a threat to nursery crops during 1955. He thanked the nurserymen for their continued cooperation with the bureau on these problems.

Prof. L. H. MacDaniels, head of the department of floriculture and ornamental horticulture at Cornell, briefly discussed the existing facilities at the university for research in the various phases of plant science and related fields and described the preliminary plans for expanded facilities necessary to maintain a progressive research program. Dr. William E. Snyder spoke on the plant propagation workshop and invited nurserymen interested in the use of mist for rooting cuttings to attend the workshop.

Presentation of an excellent slide projector was made to Al Syneseal, the outgoing president, in recognition of his meritorious job as head of the association. He expressed his appreciation, not only for the gift, but also for the cooperation given him by the members of the association during his term of office.

INCORPORATED December 1, 1954, the Paul Offenberg Nurseries now go under the name of the Paul Offenberg Nursery Co., Columbus, O., the management remaining the same.

MAGNOLIA SOULANGEANA

5000 3 to 4 ft.

well branched
and
well budded

\$ 45.00 per 10

400.00 per 100

30 trees at the 100 rate

CHANDLER
LANDSCAPE & FLORAL CO.

101 W. 47th St.
KANSAS CITY, MO.

SPECIAL NOTICE!

We have a few hundred of each of the following native-grown, well-headed shade trees in **Green Ash, White Birch, Rubrum Maple, Pin Oak** and **Sweet Gum**.

	Each
5 to 6 ft., B.R.	\$ 1.15
6 to 8 ft., B.R.	1.40
8 to 10 ft., B.R.	4.00
1 to 1 1/2-in. cal., B&B.	6.00
1 1/2 to 2-in. cal., B&B.	7.50
2 to 2 1/2-in. cal., B&B.	9.50
2 1/2 to 3-in. cal., B&B.	12.50
3-in. cal. and up (in lots of 100) ...	15.00

These prices are all F.O.B. shipping point.

A few hundred 4 and 5-year-old Apple trees in leading varieties, bare root.

	Each
1-in. cal.	\$0.90
1 1/4-in. cal.	1.25
1 1/2-in. cal.	1.50
2-in. cal.	2.50

Flowering Crab Apple, bench root grafts, F. R., \$10.00 per 100.

French Lilac, bench root grafts, \$15.00 per 100.

Multiflora Roses — 50,000 3-year-old, extra-heavy, \$50.00 per 1000.

A general line of grafted **Junipers** in 4 to 8 ft., shrubs, etc.

EGYPTIAN NURSERY & LANDSCAPE CO.
FARINA, ILL.
Day Phone 3551 Night Phone 2641

HEMLOCK

Rhododendron—Kalmia

Azalea

CURTIS NURSERIES
CALICOON, N. Y.

LONG ISLAND SCHOOL

[Continued from page 27]

should be recognized by the competent businessman. Some of these are: Advertising, contacting of customer (calls and interviews), planning, estimating, selling, financing, collecting, rent, insurance and other overhead.

The common assumption that a 100 per cent markup in the sale of a plant is a fair price is fallacious, said Mr. Dalsimer. It does not represent a 100 per cent profit and is a giveaway of contingent services if the material is planted by the seller. By way of example the following transaction was cited:

Cost of plant material\$ 470.00
Charge for assembling material. 30.00
100% markup 500.00

Fair price\$1,000.00
Add other service charges:
10% delivery charge\$ 100.00
25% planting costs 250.00
5% materials for planting 50.00
5% cleanup 50.00
10% planting guarantee 100.00

Actual total is three times
the original price\$1,500.00

A uniform policy of plant guarantees would help the nurserymen. Weak guarantees instill a lack of confidence in customers, and hold-out of payments is a result. Mr. Dalsimer said his guarantee policy has actually cost no more than four per cent in operation. Of course, such a guarantee is valid only if the planting is done by the nurseryman.

Tools for Estimating

Experience has proved that when a customer has a clear understanding of just what a landscape job involves and when prices are clearly quoted by units, there is much less chance of misunderstanding when the bills are presented. Rather than quote a lump sum price for an extensive job, it is advisable to divide it into sections. In this way it is not so staggering and also opens the way to progressive development of a property over several years. In such a progression, lawn work and specimen tree planting are accomplished first, followed by foundation planting, boundary planting, screen planting, other groupings, herbaceous plantings and accessory and garden ornaments.

The Dalsimer estimator makes use of prepared price lists and Surtree's charts, which with conversion factors are used to make up unit prices for all phases of work. Prepared estimating sheets are used for each job, a separate sheet for planting, lawn operations and masonry work. These three operations, plus any

Special Prices to the Trade

VIBURNUM BURKWOODI

(Gardenia-scented Snowball)

For spring delivery, F.O.B. Dayton, O. Own-root—Lining-out size in plant bands.

Per 50	Per 100	Per 1000
\$15.00	\$25.00	\$225.00

	Per 10	Per 100
18 to 24 ins., B.R.	\$10.00	\$ 85.00
18 to 24 ins., balled	15.00	135.00
2 to 2½ ft., balled	20.00	185.00
2½ to 3 ft., balled	27.50	250.00

VIBURNUM CHENAULTI

More evergreen and compact growing, same flowers as Burkwoodi. Own-root—Lining-out size in plant bands.

Per 50	Per 100	Per 1000
\$17.50	\$30.00	\$250.00

	Per 10	Per 100
18 to 24 ins., B.R.	\$12.50	\$110.00
18 to 24 ins., balled	17.50	160.00
2 to 2½ ft., balled	22.50	210.00
2½ to 3 ft., balled	30.00	275.00

The Siebenthaler Co.

3001 Catalpa Dr.

DAYTON 5, O.

"CRIMSON PYGMY" DWARF RED BARBERRY

The new, sensational shrub for ranch-house landscaping, dwarf hedges, potting and B&B sales.

	10 rate	100 rate	1000 rate
L.O. size from 2¼-in. pots	\$0.35 ea.	\$0.25 ea.	\$0.22½ ea.
2-yr., field plants	.75 ea.	.60 ea.	.50 ea.

THE COTTAGE GARDENS

LANSING 15, MICH.

NEOSHO NURSERIES COMPANY

Neosho, Missouri

Send want list for prices on roses, evergreens, shrubs, fruit and shade trees. Hybrid Elm a specialty.

Hydrangea P. G.

Hydrangea P. G. (Tree Form)

Ornamental Trees

Grapevines, 1-yr.

Thorne Brewster

WILLOWBEND NURSERY

PERRY, O.

QUALITY LINERS

(free packing)

	Per 100	Per 1000
Green Barberry, 2-yr., S.	\$5.00	\$40.00
12 to 16 ins.		
Viburnum lantana, 1-yr.	6.00	50.00
S. 6 to 9 ins.		

CARLETON NURSERY CO.
Jones Rd. CARLETON, MICH.

REMEMBER SHERMAN'S for . . .

Alpine Currant
Hydrangea P. G.
French Lilacs
Snowball
Shade Trees
Evergreens
Phlox
Peonies
Plum Seedlings
Lining-out Stock

Let us quote you on your requirements.

SHERMAN NURSERY CO.

CHARLES CITY, IA.

Over 100 Years' Nursery Experience

ILGENFRITZ NURSERIES, Inc.

The Monroe Nursery
MONROE, MICHIGAN

GET THE BEST

BUY ILGENFRITZ

EUONYMUS AND COTONEASTER

Particularly nice plants which benefited by our 15.2 inches of rainfall in June, July and August.

Each at Each at
100 1000
rate rate

EUONYMUS ALATUS COMPACTUS

2-yr., pots\$0.22 \$0.20
4-yr., T., 8 to 10 ins.... .40 .35

EUONYMUS RADICANS ERECTUS

2-in. pots17 .15
*3-yr., T., 12 to 15 ins.... .45 .40
*3-yr., T., 15 to 18 ins.... .65 .60

COTONEASTER APICULATA

2-in. pots25 .22
*3-yr., T., heavy..... .60 .55

*The largest of these varieties are suitable for Cloverset potting or cans.

Quick shipment late winter or spring. Bare-root. Minimum order 50 plants of a variety, 100 plants total. Usual catalog terms.

BERRYHILL NURSERY CO.

P. O. Box 696 SPRINGFIELD, O.

Broad-leaved Coniferous Evergreens

Write for complete price list.

T.G. OWEN & SON, INC.

Columbus Mississippi

TEUCRIUM CHAMAEDRYS

Per 100 Per 1000
Heavy, 1-yr., field plants.....\$18.00 \$170.00
Medium grade 15.00 140.00
Well-rooted cuttings 5.00 45.00

KINGWOOD NURSERIES
MENTOR, O.

America's Finest ROSES • BULBS • PLANTS and SHRUBS

WRITE FOR LIST MENTOR, OHIO

Wayside Gardens

miscellaneous items, are totaled on a summary sheet. The name of the client and the plan number is marked on each sheet. This data eliminates much lost effort in assembling materials.

Lawn work is the most difficult phase of landscape where customer satisfaction is concerned. Under Long Island weather conditions, guarantees are not warranted unless the work is done at the proper time of year. Unit prices are quoted on a sliding scale, approximately 5 cents per square foot on areas of 15,000 square feet or over and as high as 10 cents per square foot on areas under 500 square feet. The price includes soil preparation, grading, lime, fertilizer, grub proofing and seeding with a high grade of seed. First cut and patching are important, but are done only if the job is paid for at the time of finish of the planting. Prompt settlement of lawn accounts should be sought after, because future neglect by the owner can quickly ruin a new lawn. In some cases maintenance may be contracted for.

Mr. Dalsimer's presentation was followed intently by all who were present, and appreciation was expressed for his fine presentation of an important subject.

Peter Bosle presented data based on his observation of roses in the test gardens of the Long Island Agricultural and Technical Institute during the past two years. The data has great validity, since it is the result of daily observation throughout the growing season. During the peak season as many as 60 hours a week were needed to encompass all of the work. Observations were confined to the modern hybrid teas and floribunda roses.

Most roses are sold to the public on the basis of the flower appearance. An advertising illustration indicates the size, shape and color of a new variety, and even in demonstration gardens these are the obvious appeals to the casual observer. Some popular varieties may fall far short of perfection when other factors are considered. In bright sunlight some varieties may not retain good color for more than a day, while others may last for three or four days. Some varieties break out of the bud rapidly, and others hold for two days. A scant blooming variety may average ten or less blooms per month, while a productive one may bear 20 or 30 flowers. Among roses for garden planting it is the variety which bears an abundance of long-lasting flowers that is most satisfactory. Mr. Bosle presented

SEEDLINGS FOR SPRING

Variety, age and size	Per 100	Per 1000
Scotch Pine, 2-yr., 2 to 4 ins.....	\$ 2.00	\$10.00
Scotch Pine, 2-yr., 4 to 8 ins.....	4.00	20.00
Riga Scotch Pine, 2-yr., 2 to 4 ins.....	3.00	15.00
Riga Scotch Pine, 2-yr., 4 to 8 ins.....	5.00	25.00
Austrian Pine, 2-yr., 2 to 6 ins.....	4.00	20.00
American Red Pine, 2-yr., 2 to 4 ins.....	3.00	15.00
American Red Pine, 3-yr., 2 to 6 ins.....	5.00	25.00
Mugho Pine, dwarf, 3-yr., 2 to 5 ins.....	3.00	25.00
White Pine, 2-yr., 3 to 6 ins.....	4.00	20.00
Norway Spruce, 2-yr., 2 to 4 ins.....	3.00	15.00
Norway Spruce, 2-yr., 4 to 7 ins.....	5.00	25.00
White Spruce, 2-yr., 2 to 4 ins.....	3.00	15.00
Red Spruce, 2-yr., 3 to 6 ins.....	4.00	20.00
Black Hills White Spruce, 2-yr., 3 to 5 ins.....	4.00	20.00
Blue Spruce, Colorado, 2-yr., 2 to 4 ins.....	4.00	20.00
Douglas Fir, 2-yr., 3 to 5 ins.....	4.00	20.00
American Arborvitae, 3-yr., 3 to 6 ins.....	5.00	25.00

SPECIAL SEEDINGS

Mugho Pine, 4-yr., 7 to 10 ins.....	11.00	55.00
American Red Pine, 3-yr., 5 to 10 ins.....	6.00	30.00
Norway Spruce, 3-yr., 5 to 10 ins.....	8.00	40.00
White Spruce, 3-yr., 4 to 8 ins.....	8.00	40.00
Red Spruce, 4-yr., 6 to 10 ins.....	8.00	40.00
Blue Spruce, Colorado, 3-yr., 3 to 6 ins.....	8.00	40.00
American Arborvitae, 3-yr., 6 to 10 ins.....	8.00	40.00
Austrian Pine, 3-yr., 6 to 10 ins.....	8.00	35.00

TRANSPLANTS

Scotch Pine, 2-1, 3 to 6 ins.....	6.00	30.00
Scotch Pine, 2-2, 5 to 10 ins.....	10.00	50.00
Austrian Pine, 2-2, 5 to 10 ins.....	9.00	45.00
Red Pine, American, 2-2, 5 to 10 ins.....	8.00	40.00
Norway Spruce, 2-2, 6 to 10 ins.....	11.00	55.00

Some items listed are in limited supply. May we suggest booking your order early to be assured of filling your needs. Pennsylvania orders, add 1% sales tax or exemption certificate. Cash, or 25% deposit with order, balance C.O.D. 5% discount on quantities of 25,000.

SAM DIBLE NURSERY

R.F.D. 3 SHELOCTA, PA.

LINING-OUT and FINISHED STOCK

Ask for List

THE COTTAGE GARDENS

Our 31st Year

Nick I. W. Kriek—Harold E. Hicks
LANSING 15, MICH.

WELLER'S PERENNIALS

With That Wonderful Root System
Headquarters for
HARDY MUMS AND PHLOX
Ask for our Perennial Catalog.

WELLER NURSERIES CO., Inc.
Leading Perennial Growers
HOLLAND, MICH.

selected lists showing the best varieties and, for comparison, a few of the poorest performers in each of the major color groups of the hybrid tea and floribunda roses. This material will be published in entirety at a later date. Copies of his evaluations may be had by writing to the department of ornamental horticulture of the Long Island Agricultural and Technical Institute, Farmingdale, N. Y.

MARYLAND MEETING

[Concluded from page 16]

excellent seedling camellias growing along the seaboard that had successfully withstood temperatures from 10 to 20 degrees below zero Fahrenheit. These include both the sasanqua and japonica types. Dr. de Vots stated that the camellias most satisfactory along the Atlantic coast were those that bloomed early (late September to mid-November) or late (mid-March through April).

The last talk of the afternoon was by Carl N. Johnson, university department of horticulture. He discussed landscape problems with special reference to split-level and ranch-type homes. The talk was illustrated, and emphasis was placed on the types of nursery stock best suited for tying the landscape planting to the lines of the house and the proper use of shade trees in the back yard for harmonious and pleasing effects.

During the evening of January 12 there was a social get-together for the nurserymen, their wives and friends. This was highlighted by a buffet supper and mixer at which coffee, sandwiches, dessert and punch were served. With John Donofrio as master of ceremonies, the group was entertained by three 4-H Club girls from Baltimore county, Clara Hendrix, Marjorie Hanna and Norma Rosier. Warren Johnson, university entomologist, aided with the entertainment as the song leader. Following the entertainment, Carville Akehurst, Jr., Akehurst Nursery, Fullerton, presented a movie he made on a tour of nine European countries; it showed many beautiful gardens and scenes from Italy, Greece, France, Switzerland, Holland and England.

JOHN B. WIGHT, JR., joined his father's firm, Wight Nurseries, Cairo, Ga., January 1, upon discharge from the air force after four years' service. He represents the third generation of his family to be connected with the management of the 68-year-old firm.

ROSES, ROSES, ROSES

ALL POPULAR PATENTED and NONPATENTED VARIETIES

Our roses are carefully grown, consistently sprayed and dusted during the growing season and dug only when thoroughly dormant. These roses are carefully graded and stored in our modern, automatically controlled cold storage.

Delivery of healthy, vigorous rosebushes can be made any time after early February.

Write for Special Quantity Quotations

The Shenandoah Nurseries

(Lake's)

SHENANDOAH, IA.

UPRIGHT EUONYMUS RADICANS (SARCOXIE)

It's NEW

- Hardy
- Compact
- Evergreen
- Rapid Grower
- Moderately Priced
- Sells Itself

Natural Growth
Not Sheared

Trained as a Column,
Lightly Sheared

UPRIGHT EUONYMUS RADICANS (SARCOXIE)

	Each
12 to 15 ins.	\$1.50
15 to 18 ins.	1.75
18 to 24 ins.	2.25
24 to 30 ins.	3.00
30 to 36 ins.	3.50

Trained Specimens

30 to 36 ins.	4.00
36 to 42 ins.	5.00
42 to 48 ins.	6.00

Above prices B&B. Prices of bare root on request.



STURDY 2-YR. OUTDOOR-GROWN LINERS

AS SHIPPED	Per 100	Per 1000
9 to 12 ins.	\$25.00	\$225.00
12 to 15 ins.	35.00	325.00
300 or more at 1000 rate.		
30 or more at 100 rate.		

SARCOXIE NURSERIES

WILD BROS. NURSERY CO.

Since 1875

Sarcoxie, Mo.

VOGE NURSERY

New Lebanon,
Ohio

TAXUS

JUNIPER

THUJA

LINING-OUT STOCK

FINISHED STOCK



PLANT NOTES HERE AND THERE

By C. W. Wood

A West Virginia reader writes in part as follows: "Will you please give us a list of about 10 plants suited to a sunny wall? I have a nice planting job this spring calling for about 100 wall plants, and, as there is a regular rash of wall gardens in this section, I think we will propagate about 10 kinds for future sales." The job will be a pleasant one for me, because alpenes and rock plants are my special loves, and, since rock gardening took such a beating from the Johnny-come-latelies about 15 years ago, I see far too little of them. So, when I have a chance to say a good word for any of the clan, it makes me happy.

The first step in the inquiry will be taken among the campanulas. There is found one of the most generally useful of all ornamental perennials, *Campanula carpatica*. In the climate of West Virginia, it might suffer if planted in a dry wall in full sun without provision for watering in dry weather; as most modern gardeners have such provisions, one may assume that my correspondent can use the plant in his work. The Carpathian harebell needs no introduction for American Nurseryman readers, its happy disposition and long-flowering period being known even to beginners. Observation in nurseries indicates, however, that its named forms are seldom grown.

If nurserymen do not know its better named varieties, it might pay them to investigate the following: Harmony, medium blue, flat flowers; Loveliness, light mauve, nodding flowers; Purple Carpet, upturned saucers of blue purple, freely produced on 6-inch stems instead of the foot-tall stems of ordinary carpaticas; Queen of Somerville, large, cup-shaped flowers of blue violet on stems to 15 inches in height; Viscountess Byng, pale blue flowers, really immense for a carpatica; Blue Carpet, recently commencing to appear in lists, apparently somewhat like Purple Carpet, with the same gratifyingly long (June to late September) blooming period and perhaps a slightly lighter shade of blue in the flowers, though I have not been able to verify the latter by comparison.

Named forms of campanula must

be grown from cuttings to obtain true stock; in fact, all bellflowers, except the biennials, are grown best from cuttings, when uniform plants are wanted. And practically all may be grown from cuttings of preflowering wood (April, May and June, as available). These should be stopped after root and top growth become active to prevent flowering.

The Persian candytufts are among the best of wall plants in my estimation. That is true from almost any angle one views them. First, from the viewpoint of foliage, they are, with the exception of *Aethionema warleyense* and its sports, among the loveliest of blues, even lovelier

than many plants in bloom. The better ones are really spectacular when the little bushes are hidden under a canopy of flowers, shades of pink in the wanted kinds. Finally, for the busy gardener in sections where summers are dry, their ability to prosper under the most trying conditions of drought and neglect is of great importance. Of course their height of four to eight inches exactly fits them for wall planting.

Confusion of Candytuft Names

Their names are so confused that they mean little. Then, too, the habit of interbreeding when brought together in gardens has contributed

ASPARAGUS—RHUBARB—HORSERADISH ROOTS

ASPARAGUS			
Paradise and Washington			
5-yr., clumps	Per 100	Per 1000	
3-yr., heavy	\$10.00		
2-yr., No. 1	4.50	\$ 30.00	
1-yr., No. 1	3.00	20.00	
	2.10	14.00	
VICTORIA RHUBARB			
Clumps	15.00	120.00	
1 1/2 to 2 ins., whole roots	10.00	80.00	
1 to 1 1/2 ins., whole roots	7.50	60.00	
3/4 to 1 in., whole roots	6.00	45.00	
1/2 to 3/4 in., whole roots	4.50	30.00	
HORSERADISH			
Cuttings, 4 to 6 ins.	Per 10	Per 100	Per 1000
Whole roots	\$0.50	\$3.00	\$20.00
	.90	6.75	45.00

250 at the 1000 rate

Ask for our Spring Trade List on Small Fruits.

STRAWBERRY PRICES ON REQUEST

KRIEGER'S WHOLESALE NURSERY

Phone 22

BRIDGMAN, MICH.



FINISHED STOCK and LINERS

We solicit your inquiries.

LAIRD'S NURSERIES

Route 2

RICHMOND, VA.

5 miles west of city on Broad St. Road



EVERGREENS

Growers of Quality Evergreens
Lining-out Stock a Specialty

Write for Trade List

EVERGREEN NURSERY CO.

Established 1864 : STURGEON BAY, WIS.

PINE SEEDLINGS

for Christmas trees and reforestation.

Per 100 Per 1000

SCOTCH PINE		
(2-0), 5 to 8 ins.	\$6.00	\$32.50
AUSTRIAN PINE		
(2-0), 4 to 7 ins.	6.00	32.50
AUSTRIAN PINE		
(3-0), 6 to 12 ins.	7.00	40.00
GUARANTEED PLANTING		
by experienced crews.		

Write for prices and wholesale price lists.

SMITH'S FOREST TREE NURSERY
P. O. Box 215 MAGNOLIA, O.

much to the confusion. It has all reached the point where there is little use trying to grow a lot of uniform plants from seeds. It is lucky for nurserymen, then, that they root readily when cuttings of new growths are rubbed off with a heel, following the flowering period. *A. warleyense* and its forms are sterile hybrids and have to be grown from cuttings.

Because the madwort, *Alyssum saxatile*, can also take care of itself under the same trying conditions of drought and neglect, it, too, is loved of busy gardeners. It has other recommendations, of course, including a profusion of golden flowers on 10-inch stems in spring. It comes readily from seeds and lasts for years in sunny, well-drained situations. The double-flowered form must be grown from cuttings, preferably soft ones taken in June and early July, inserted in sand or a sand-topped frame.

There are so many pinks suited to the dry, sunny wall that I am at a loss in making a choice. On second thought, I shall not make a choice at all, but shall name a few of the better wall kinds and let my inquirer make his own choice.

When *Dianthus caesius* came to mind as one of the likely candidates for a post, something prompted me to check on the name before committing myself. The check revealed that an American authority tells men in the nursery industry that it should be called *D. gratianopolitanus* (where is the sane gardener who would use that name after he had become accustomed to the consonance of *caesius*?); some European authorities say that the Linnaean name *glaucus* is right; gardeners prefer the familiar *caesius*.

I throw my lot in with the gardeners, "and let the botanists do what they will in their dusty herbaria," as Ingwersen puts it. There must be a stop somewhere in this frequent changing of names, if gardeners are to retain their sanity, and it seems to me that now is as good a time as any. After this, I shall use the names which have become thoroughly established in gardens, with perhaps some reference to the synonymy if known to me, until such time as the new names have been generally accepted.

The pinks that I should suggest in this connection are *Dianthus caesius*, *D. deltoideus*, *D. noeanus*, *D. superbus* and *D. Little Jock* hybrids.

Try Seeding Baby's Breath Early

The dwarf baby's breath, *Gypsophila repens*, would, I suspect, find

NURSERY LINERS

Christmas Tree Stock

	Per 100	Per 1000	Per 10,000
Colorado Blue Spruce, 3-2, 6 to 9 ins.....	\$18.00	\$150.00	....
Colorado Blue Spruce, 3-2, 4 to 6 ins.....	12.00	80.00	....
Colorado Blue Spruce, 3-0, 5 to 10 ins.....	10.00	65.00	....
White Spruce, 3-0, 3 to 5 ins.....	4.00	20.00	....
White Spruce, 3-0, 5 to 10 ins.....	8.00	40.00	....
*Riga Scotch Pine, 2-0, 4 to 8 ins.....	7.50	26.00	\$24.00
*Riga Scotch Pine, 2-0, 2 to 3 1/2 ins.....	3.00	14.00	12.00
*Riga Scotch Pine, 2-0, 6 to 10 ins.....	8.00	36.00	35.00
*Riga Scotch Pine, 2-0, 3 to 6 ins.....	5.00	22.00	21.00
Austrian Pine, 2-0, 3 to 6 ins.....	6.00	20.00	20.00
Austrian Pine, 2-2, 8 to 12 ins.....	12.00	90.00	....
Mugho Pine, 3-0, top sheared to about 3 ins.....	5.00	30.00	25.00
Douglas Fir, Rocky Mt. type, 2-0, 3 to 8 ins.....	6.00	28.00	25.00
Douglas Fir, taxifolia glauca, 2-2, 6 to 9 ins.....	10.00	75.00	....
taxifolia glauca, 2-2, 9 to 12 ins.....	15.00	125.00	....

TERMS

Cash with order please; or 25 per cent deposit, balance before shipment. 25¢ at 100 rate, 25¢ at 1000 rate, all seedlings in multiples of 50, all transplants in multiples of 10. Minimum order \$10.00. Packing charge included in price of trees. *Prices available on request for 50,000 or more.

MATTHEWS NURSERY

HARBOR SPRINGS, MICH.

Telephone 123 or 732

HEMLOCKS

	Each
1000 30 ins.....	\$2.50
2000 36 ins.....	3.00
2000 42 ins.....	3.50
500 48 ins.....	4.00

F. O. B. Our Nursery.

HEAVY-SHEARED PLANTS

Prices of Other Finished
Stock Upon Request.

Tritschler's
GREENHOUSES

NASHVILLE 9, TENN.

LILACS FOR AMERICA, by Lilac Survey
Committee. 30 species, 800 varieties. 48 p. \$1.00
postpaid.
American Nurseryman Chicago 4, Ill.

SPRING, 1955

Fruit trees, shrubs, shade trees,
ornamental trees, evergreens and taxus.

QUANTITIES IN:

Arborvitae, Aurea Nana
Arborvitae, Dark Green American
Berberis Mentorensis
Birch, Weeping Cut-leaved
Cornus Florida
Cotoneaster Divaricata
Cotoneaster Opiculata
Crab Apple, Flowering
Euonymus Alatus Compactus
Euonymus Patens
Euonymus Vegetus
Juniperus Canadensis
Juniperus Columnaris
Juniperus Glauca
Juniperus Keteleeri
Juniperus Pfitzeriana
Maple, Silver
Privet, Amur River North
Prunus Newport
Willow, Thurlow

C. M. HOBBS & SONS, INC.
BRIDGEPORT, IND.
Established 1875



Hardy Northern-Grown Stock at WHOLESALE

JEWELL NURSERIES, Inc.

Write for Price List.

Box 457, LAKE CITY, MINN.

a place in most gardeners' plans for clothing a dry, sunny wall. Because it is difficult to transplant after it has attained much size, most commercial growers, especially neighborhood nurserymen who sell plants while in flower, stay away from the dwarf baby's breath. If nurserymen have had trouble in that respect, they might try seeding it early, transplanting as soon as the first true leaves appear into rose pots, from which they are sold before the plants become too large.

Evergreen candytuft, *Iberis sempervirens*, is another natural plant for the present purpose, being indestructible in the well-drained soil of a sunny wall. As it has no eccentricities, no more need be said about it. If one wants to go farther afield in the candytufts, try any of the perennial kinds which appear in catalogs under all sorts of names, knowing that they are sure to make intriguing wall ornaments.

Because *Nepeta mussini* is one of my favorite herbs, I should have been greatly disappointed if it had not responded to wall treatment when we tried it in a south wall some 30 years ago. But it did respond, and nobly, and has since been one of my favorite, sunny wall plants. As Mrs. Wilder's description is better than I could do, it is given here: "It makes a mist of gray, tumbling branches and lavender spikes, from the time the tulips blossom pretty well until frost, if given an occasional clipping." Cuttings, taken in spring, root with ease in an outdoor frame, blooming the first year if allowed to do so. Incidentally, I understand that some botanists call it *N. faasseni*.

Trailing soapwort, *Saponaria ocyroides*, which was fully treated in a recent note in this column, does not need further comment now, except to give it a place in the 10 plants for a sunny wall. Take cuttings of new growths in July or August, insert them in an outdoor frame and put on sash before really cold weather arrives. They will be ready to sell the following spring. Of course, *S. ocy-*

NORTHERN-GROWN EVERGREENS

	Per 100	Per 1000
Riga Scotch Pine, S.....	\$ 2.50	\$ 15.00
Riga Scotch Pine, T., (2-1), 4 to 9 ins.....	4.50	38.00
True Dwarf Mugho Pine, T., (2-2), 3 to 5 ins.....	7.50	65.00
Dwarf Alberta Spruce, T., (2-2), 4 to 8 ins.....	35.00	....
Juniperus glauca hetzi, T., (2-2), 8 to 15 ins.....	25.00	....
Pyramidal Arborvitae, T., (2-2), 6 to 12 ins.....	35.00	250.00
Colorado Blue Spruce, T., (2-2-2), 6 to 10 ins.....	13.50	125.00

(These Colorado Spruce are bushy and heavy to good blues.)

All Transplants from Open Field Beds.

HOUSTON EVERGREEN NURSERY CADILLAC, MICH.

Minnesota Grown

**FLOWERING CRABS
ORNAMENTAL TREES
and SHRUBS**

Fruit Trees and Berries

**Complete Selection
of Fine Roses**

Write for our Free Wholesale Catalog

Andrews
NURSERY COMPANY
SINCE 1872
FARIBAULT, MINN.

QUALITY LINERS

JUNIPERUS
Glauca hetzi
Andorra
Vanchron

	Each	Each
	per 100	per 1000

4-yr., 6 to 9 ins.....\$0.45 \$0.40

4-yr., 9 to 12 ins......55 .50

TAXUS

Cuspidata, 6 to 9 ins.

and 9 to 12 ins.

Thayeri, 6 to 9 ins.

Hatfieldi, 6 to 9 ins.

5-yr., 6 to 9 ins......50 .45

5-yr., 9 to 12 ins......65 .60

No packing charge.

BROWN DEER
NURSERIES

P. O. Box 1747

MILWAUKEE, WIS.

NORTHERN-GROWN STOCK

Evergreen Liners

Bleeding Hearts

Ornamental Shrubs

Fruit Trees

French Lilacs

Philadelphus Minnesota Snowflake
(Plant Patent No. 538).

Send for list.

J. V. BAILEY NURSERIES
ST. PAUL 6, MINN.

PERENNIALS

2-yr. Transplanted Stock
Liners

Chrysanthemums—R.C. and 2½-in. pots.
4 New Mums

From Minnesota—Wenonah, early, double, pink.

Vulcan, double, red.

From Nebraska—Kiowa, double, brilliant orange-red.

North Platte, early, large flowers, double yellow.

**PERKINS
PLANTS
LEASE**

PERKINS BROS.
ST. PAUL 6, MINN.



Vase-Shaped Juniper



Pfitzer Juniper



Irish Juniper

Healthy, Hardy, Outdoor-Grown Liners

2½-in. deep pots, bigger than 2¼-in. standards

Our liners have proven themselves during the past two difficult growing seasons.

	Each
Goldcone Arborvitae	19c
Goldspire Arborvitae	20c
Berkmans Arborvitae	19c
Bonita Arborvitae	19c
Golden Bonita Arborvitae	19c
Dahoon Holly	15c
Burford Holly	20c
Hume Hybrid No. 2	17c
Japanese Holly	17c

	Each
Bluespire Arborvitae	19c
Baker Arborvitae	19c
Pfitzer Juniper	20c
Sylvestris Juniper	20c
Vase-shaped Juniper	17c
Cherry Laurel	17c
Loropetalum	17c
Pyracantha Lalandi	17c
Heckrotti Honeysuckle	17c

	Each
Irish Juniper	17c
Kiyono Juniper	17c
Procumbens Juniper	20c
Von Ehron Juniper	18c

Purple Honeysuckle	17c
Euonymus Patens	17c

Paper Cups and
Packing Free

10% for Cash

Prices F.O.B.
Scottsville

Field-grown and container plants—Nursery tools and supplies. Write for Price List.

VERHALEN NURSERY
Company
SCOTTVILLE • 12140 HARRY HINES BLVD.
TEXAS • DALLAS, TEXAS
Your Profits Grow in Verhalen Plants

moides may be grown from seeds.

Some growers to whom I talk take exception to my enthusiasm for the stonecrops, but I go merrily on my way extolling their virtues and vices, if any. Some are spreaders, to be sure, and should be kept away from choice situations; others are as restrained as the most repressed and are safe anywhere. I should dislike to make a single choice among all the plants in this class; so let me name a few, any one of which would fill the present requirements: *Saponaria ellacombianum*; *S. middendorffianum*, especially lovely when its leaves take on their bronzy tinges; *S. hispanicum minus*; *S. lydium*; *S. tartarinowi*.

I purposely left the sun roses for the last, not because they are last

in point of desirability, but rather because I wanted to be sure to have them in the list and thought it safest to let them have 10th place. The species holds little interest to the general gardener at this late day, the fine named varieties having long ago usurped first place in the popularity poll. The availability of the named kinds varies so much from year to year that mention of them here before the 1955 catalogs are in would probably be little more than an aggravation. I am sending the inquirer a short list of kinds which were available in the east last fall; if nurserymen are interested and will drop me a card, I shall try to supply them a list available at the time of inquiry. Greenwood cuttings should be made in early summer.

AWARD WINNING ROSES
AARS Winners and 150 other popular varieties. In attractive, colorful packages or bare root.

PECAN TREES
Beautiful shade, productive too! Prolific varieties. Sizes 18 in. to 12 ft. In attractive packages or bare root. Get stock list and prices.

ARP Nursery Co.
P. O. Box 867-J, TYLER, TEX.

Stock that is hardy.
WHOLESALE
SUMMIT NURSERIES
STILLWATER, MINN.

NEW SUB-ZERO EVERGREEN IVY

**Special Strain Stands
20 Degrees Below Zero**

These Sub-Zero English Ivies (*Hedera helix*), with their glossy evergreen leaves, are the descendants of a remarkably hardy parent plant which has withstood 27 Chicago winters without protection. Many generations later the offsprings of this great Ivy are displaying the same uncommon hardiness. They have been tested under all sorts of growing conditions and have continued to prosper where many other plants have failed. Most of them came through in fine shape in the winter of 1951 when the temperature dropped to 31 degrees Fahrenheit below zero here in Woodstock.

THORDALE IVIES are strong, vigorous growers. Excellent climber and equal ground cover plant. They are grown in 2½-inch pots in outdoor frames. Their undisturbed root system assured rapid growing on and makes transplanting practical even during the hottest summer months.



**Now Offered to the Trade
for the First Time**

For the past four years these Ivies have been nationally advertised in all major garden magazines. We have never had enough stock to sell at wholesale until now. For the first time this year a block of potted plants has been set aside for the trade. They are being offered at a first-come first-served basis until the 1955 trade quota has been sold. Published retail prices are rigidly maintained as follows: 6 for \$4.50; 12 for \$8.50; 25 for \$15.00; 100 for \$60.00.



**Wholesale Prices
\$30.00 per 100**

Orders are booked according to date received. Our shipping season begins April 15. Terms are cash with order unless credit has been established. All prices, F.O.B. Woodstock, Illinois.

Thorndale Planting Guide for vines and ground cover plants is yours for the asking . . . on your business stationery, please. Write to Thorndale Farms Nursery, Woodstock, Illinois.

**Thorndale
FARM**
WOODSTOCK • ILLINOIS

Growers of Thorndale Ivies and other hardy vines and ground cover plants.

INDIANA CONFERENCE

[Continued from page 13]

ture and contrasting the amounts spent annually for cosmetics and for ornamental horticulture. Ornamental horticulture has not been receiving promotional support or research attention proportional to its place in the economy of Indiana agriculture. Although Indiana compares favorably with the national average in money spent for ornamental horticulture, this compares poorly with amounts spent for many nonessential items. The field is wide open for development if the public is only educated to be half as observant of home surroundings as the wife is of the latest styles in automobiles or appliances, clothing or shoes. Nurserymen have a wonderful product to sell, but they must sell it.

Display Euonymus

Henry Schnitzius, New Augusta Nursery, New Augusta, described the euonymus group as plants answering many important requirements. An exhibit of some sixteen typical specimen euonymus plants was on display in the conference room for the three days, identified only by numbers. Mr. Schnitzius passed out contest sheets and urged all present to try identification of the various euonymus varieties or forms. A prize was promised to the winner. W. E. Cunningham, Cunningham Gardens, Waldron, followed with colored slides of euonymus in established landscape plantings. This illustrated talk was the result of a year of preparation, and many fine old specimen plants were shown.

Dr. W. K. Leslie, superintendent, Dominion experiment station, Morden, Manitoba, brought in Kodachrome the beauties of ornamental horticulture in Europe and the British Isles to an attentive audience.

A panel discussion on labor-management relations by Argel Pion, Harold Bohling, Henry Schnitzius and Alex Tuschinsky emphasized the need for offering maximum year-around employment. A number of forms of pay incentives had been tried, but each had its failings. It was agreed that the best incentive was the personal relationship between nurseryman and employee and the development of interest in the plant materials and the job. If employees are expected to be efficient and productive, the employer must see that all work is thoroughly planned in advance and the supplies and equipment are on hand so that there need be no delay. Employees quickly sense any lack of proper organization, it was pointed out. They

NORTHERN-GROWN STOCK

Dug, graded and packed for growing satisfaction.

3-YR. SEEDLINGS

	Per 100	Per 1000
Colorado Blue Spruce 4 to 6 ins.	\$ 3.50	\$ 30.00
Norway Spruce, 4 to 6 .	3.50	30.00
White Spruce, 6 to 8 ins. .	3.50	30.00
4 to 6 ins.	3.00	25.00
Douglas Fir, 4 to 6 ins. .	3.50	30.00
Mugho Pine, Dwarf		
Tyrolean, sheared, 4 ins. .	4.00	35.00
White Pine, 4 to 6 ins. .	3.00	25.00
Scotch Pine, Riga 6 to 8 ins.	3.50	28.00
Austrian Pine, 6 to 10 ins. .	3.50	30.00
Ponderosa Pine, 8 to 12 ins.	3.50	30.00
6 to 8 ins.	3.00	25.00
American Arborvitae 4 to 8 ins.	3.00	25.00

2-YR. SEEDLINGS

American Arborvitae 2 to 4 ins.	2.50	20.00
Colorado Blue Spruce 3 to 4 ins.	3.00	25.00
in 10,000 lots.		20.00
White Spruce 2 to 4 ins.	2.50	20.00
Black Hills Spruce 2 to 4 ins.	3.00	25.00
Norway Spruce, 2 to 4 ins. .	3.00	25.00
Scotch Pine, 2 to 4 ins. .	2.50	18.00
Austrian Pine, 2 to 4 ins. .	3.00	25.00
Ponderosa Pine, 3 to 4 ins.	2.50	20.00
Douglas Fir, 2 to 4 ins. .	3.00	25.00
White Pine, 2 to 4 ins. .	2.50	20.00

TRANSPLANTS, 2-2, 4-YR.

Mugho Pine, Tyrolean sheared, 4 to 8 ins.	25.00	....
American Arborvitae 12 to 15 ins.	15.00	....
10 to 12 ins.	12.00	100.00
6 to 10 ins.	10.00	80.00
Norway Spruce 10 to 12 ins.	12.00	100.00
4 to 10 ins.	10.00	80.00
Colorado Blue Spruce 6 to 8 ins.	12.00	100.00

If better seedlings can be grown, we will grow them.

**J. R. PALMER & SON
BLACKDUCK, MINN.**

**We have
for spring sale**

- 5,000 White Pines (*Pinus strobus*) 3 to 6 ft., collected trees
- 2,000 *Cornus florida* 4 to 8 ft., collected trees 50 per cent budded
- 2,000 *Abies fraseri* 2 to 5 ft., nursery grown
- 2,000 *Kalmia latifolia* 2 to 3 ft., collected

All of the above shipped B&B in trailer lots at attractive prices.

Write for prices on the above and other items to:

ANTHONY LAKE NURSERY

Pineola, N. C.

Phone: REpublic 3-4542

should know not only how to do their work, but why it should be done in that way. With knowledge should come interest. Above all, the employee needs a sense of security and permanence if he is to become an effective worker.

Robert Hobbs was master of ceremonies at the annual evening banquet, which was followed by a musical program from one of the student organizations.

Thursday morning, Dr. Clarence Gotshalk, director, Morton Arboretum, Lisle, Illinois, discussed the services of an arboretum to the nursery industry and to the public. He listed and elaborated on seven things the arboretum can do for nurserymen, and seven the nurserymen can do for the arboretum. Briefly, the arboretum interests the public in better plants, informs the public of possible sources of these plants, aids in clearing up incorrect identification and nomenclature and serves as a source of propagating material.

Nurserymen can aid the arboretum by growing a limited supply of new material in demand, aid in identification of doubtful plants, furnish samples of good new plants, donate material that may be in surplus, but which would be of value to the arboretum for various test purposes, and refer maintenance or other problems of the buying public.

Dr. Gotshalk listed and showed slides of twenty-two plants which many visitors try to buy with little success in commercial nurseries.

Final Business

A final business meeting, followed by the Indiana A. A. N. chapter, luncheon, concluded the conference. A gain of fifteen active members was reported, as well as several additional associate members. Addition of a research committee to other standing committees was approved. Marvin Bareither, New Augusta Nursery, presented the sketch of a suggested state association emblem.

Dates of January 12 to 14 were approved for the 1956 winter meeting at Purdue.

Gorrel Shumaker reported that establishment of an arboretum at The Hills, near Lafayette, appeared a lost cause, with dismissal of the arboretum committee appointed by the organization holding an indefinite lease to the property under consideration. The association must now look for other possible locations.

Dr. Ellis reported that a grower-retailer committee is being organized on a national and state basis to work on orderly marketing. He said nurserymen should become informed on

EVERGREENS

		10 rate each	100 rate each
2000	Berckmans Golden Arborvitae, 2 to 3 ft.	\$2.25	\$2.00
100	3 to 4 ft.	3.75	3.50
1500	18 to 24 ins.	1.75	1.50
750	15 to 18 ins.	1.50	1.25
1500	Fruitlandi Arborvitae, 18 to 24 ins.	1.75	1.50
400	Fruitlandi Arborvitae, 2 to 3 ft.	2.25	2.00
500	Conspicua Arborvitae, 3 to 4 ft.	2.25	2.00
200	Conspicua Arborvitae, 4 to 4 1/2 ft.	3.00	2.50
150	Chinese Column Juniper, blue 10 to 12 ft.	8.50	8.00
150	8 to 10 ft.	7.50	7.00
150	6 to 7 ft.	5.75	5.25
500	5 to 6 ft.	4.50	4.25
100	Chinese Pyramidal Juniper, 6 to 7 ft.	6.50	6.25
500	30 to 36 ins.	2.75	2.50
500	24 to 30 ins.	2.25	2.00
200	Sylvester Juniper, 3 to 3 1/2 ft.	2.50	2.25
200	Sylvester Juniper, 24 to 30 ins.	2.25	2.00
100	French Spike Juniper, 6 to 7 ft.	3.00	2.50
200	Irish Juniper, 24 to 30 ins.	1.75	1.50
300	Ashford Juniper, 24 to 30 ins.	2.00	1.75
200	Savin Juniper, 15 to 18 ins.	2.00	1.75
1000	Greek Juniper, 3 to 5 ft., heavy	3.50	3.00
300	18 to 24 ins.	2.00	1.75
300	15 to 18 ins.	1.75	1.50
200	Andorra Juniper, 24 to 30 ins.	2.00	1.75
300	Andorra Juniper, 18 to 24 ins.	1.75	1.50

All Plants B&B priced at our nursery and loaded on your trucks.


These plants must be moved before April 1 due to an industrial development on property.

ROBERT MCINTYRE NURSERY

Woodcrest Ave.

NASHVILLE 11, TENN.

Scarff's Nursery
 FRUITS
 ORNAMENTALS
 LINING-OUT STOCK
 Send for Complete Trade List.
 NEW CARLISLE, O.


 Wholesale growers of the best
 Ornamental Evergreens
 Deciduous Trees
 Shrubs and Roses
 Write for our current trade list
THE KALLAY BROTHERS CO.
 Painesville, Ohio

65 PRACTICAL GARDEN PLANS
 by John Elliott. Wide range of plans for many conditions. **\$1.00.**
 American Nurseryman Chicago 4.

**Specimen Landscape
 Materials
 Our Specialty . . .
 TAXUS**



W. A. NATORP CO.

4400 READING ROAD
 CINCINNATI 29, OHIO

Visit our nurseries when in Cincinnati

BROAD-LEAVED EVERGREENS

	Each	Each Per 25	Each Per 100
<i>Euonymus patens</i>			
1 1/2 to 2 ft.....	\$1.75	\$1.60	\$1.50
2 to 2 1/2 ft.....	2.00	1.90	1.75
<i>Ilex cornuta compacta</i>			
1 1/2 to 2 ft.....	2.75	2.50	2.25
2 to 2 1/2 ft.....	3.50	3.00	2.75
<i>Ilex cornuta burfordi</i>			
1 1/2 to 2 ft.....	2.75	2.50	2.25
2 to 2 1/2 ft.....	3.50	3.00	2.75
2 1/2 to 3 ft.....	4.25	3.75	3.25
<i>Ilex crenata convexa</i>			
15 to 18 ins.....	2.50	2.25	2.00
<i>Ilex crenata globosa</i>			
15 to 18 ins.....	2.50	2.25	2.00
18 to 24 ins.....	3.25	3.00	2.50
<i>Ilex vomitoria</i>			
1 1/2 to 2 ft.....	1.75	1.50	1.25
<i>Jasminum floridum</i>			
1 1/2 to 2 ft.....	1.75	1.60	1.50
2 to 3 ft.....	2.00	1.90	1.75
<i>Ligustrum japonicum</i>			
5 to 6 ft.....	2.75	2.60	2.50
6 to 7 ft.....	3.50	3.25	3.00
<i>Ligustrum lucidum nobile</i>			
3 to 3 1/2 ft.....	3.25	3.00	...
3 1/2 to 4 ft.....	3.75	3.50	...
<i>Nandina domestica</i>			
1 1/2 to 2 ft.....	1.60	1.50	1.25
2 to 2 1/2 ft.....	1.75	1.60	1.50
2 1/2 to 3 ft.....	1.85	1.75	1.60
<i>Osmanthus fortunei</i>			
3 to 3 1/2 ft.....	3.00	2.75	2.50
3 1/2 to 4 ft.....	3.75	3.50	3.25

CONIFERS

<i>Juniperus, Pfitzer</i>			
2 1/2 to 3 ft.....	3.00	2.75	2.50
3 to 4 ft.....	3.50	3.25	3.00
<i>Juniperus, Irish</i>			
2 1/2 to 3 ft.....	2.50	2.00	1.50
3 to 3 1/2 ft.....	3.00	2.50	2.00
<i>Retinospora squarrosa veitchi</i>			
2 to 2 1/2 ft.....	2.50	2.25	2.00
<i>Thuja (Globe Arborvitae)</i>			
24 to 27 ins.....	2.75	2.50	2.25
27 to 30 ins.....	3.25	3.00	2.50
<i>Thuja (Hovey Arborvitae)</i>			
2 to 2 1/2 ft.....	2.00	1.75	1.50
2 1/2 to 3 ft.....	2.50	2.25	2.00
<i>Thuja occidentalis (Pyramidal Arborvitae)</i>			
2 to 2 1/2 ft.....	2.25	2.00	...

These prices are for prompt acceptance; may be withdrawn.

To get the 25 and 100 rates these quantities are to be dug at one time; where more than one size is listed, the sizes may be assorted. The prices are NET, per each. There are a lot of other things also; send want list.

LINDLEY NURSERIES, INC.
P. O. Box H GREENSBORO, N. C.

this project and spoke of the possibility of receiving help in telling their story. Dr. Ellis also called attention to the existence of federal research and marketing funds available for the 11-state north-central region. Committees exist for research on problems of fruits and vegetables, cereal crops, etc., but none exists for ornamental horticulture, although this is an important segment of the agriculture of the region. Dr. Ellis said such a committee representative of ornamental horticulture could be set up if the existence of a common problem could be shown and a properly drafted program presented. This would be one project for the newly authorized I. N. A. research committee.

INDIANA ARBORISTS

[Continued from page 12]

wilt mats and then on wounded healthy trees. Time of pruning probably has little connection with spread. From observations in an area where 160 to 200 new cases are occurring each year, only 5 per cent were from transmission through the air and 90 per cent were from tree to tree through the roots. The 5 per cent may even be too high.

The value and dangers of tree wraps were discussed. Several persons reported borer injury beneath the wraps, as well as buildup of scale insects and even damage from termites where tunnels were built beneath paper wraps to wounds on the tree trunk. Mr. Schuder recommended trunk treatment with DDT before application of wraps. DDT remains effective much longer where protected from the ultraviolet rays of sunlight. The old-time recommendation of a board to protect the south side of tree trunks from injury following transplanting still has much merit and is followed by several good nurserymen. PDB as a protective trunk treatment is not advisable except for peach borers near the ground line.

It was agreed that borers seldom, if ever, are on trees as they come from the nursery. Borers are usually secondary, attacking trees weakened from transplanting and sudden exposure to increased sunlight, drying winds and other less favorable conditions. Polyethylene tree trunk wraps are being tried for prevention of desiccation following transplanting.

Panel Discussions

In the evening was held a panel discussion of problems in brush control by spraying, of which Oliver C. Lee, Purdue University, was chair-

EVERGREEN GRAFTS

(on Red Cedar understock)

35¢ each

No packing charge.

No orders for less than 100. Order now. Satisfaction guaranteed or your money refunded.

Canaerti
Blue Haven

Pathfinder
Burki

We only have a few thousand grafts left—and remember, you don't have to buy 1000 or 10,000 to buy our grafts at 35¢ each.

Green and Silver Gasei Cypress grafts (grafted on arborvitae) also 35¢ each.

Pfitzer Juniper, out of 2 1/4-in. rose pots. Potted spring of 1954.

Extra nice.....15¢ each
No order for less than 100.

Red Cedar

S., 1-yr., 3 to 5 ins....\$15.00 per 1000
No order for less than 1000.

Juniperus Scopulorum (Silver Cedar)

1-yr., 2 to 4 ins.....\$25.00 per 1000
No order for less than 500.

M. MEYER NURSERY

5439 S. Hydraulic
WICHITA 15, KAN.

COMPLETE ASSORTMENT OF

**Evergreens, Fruit Trees, Shade
Trees, Roses and Lining-out Stock.**

Write for complete list.

ONARGA NURSERY CO.
ONARGA, ILL.

CORKSCREW TREE

(*Salix Matsudana Tortuosa*)
Contorted Hankow Willow or Corkscrew Tree. Very odd appearing horticultural curiosity. Branches grow upright with a corkscrew twist. Compact growing large shrub or small tree. Ultimate height 12 to 15 ft. Small trees approximately 3 to 4 ft., \$2.50 each.
BEARDSLEE NURSERY PERRY, O.

LINERS

**TAXUS — JUNIPERS — THUJAS
HEMLOCKS — DEUTZIA GRACILIS
and ROSEA — WEIGELA EVA
RATHKE — TRANSPLANTS AND
POTTED PLANTS.**

HUMPHREYS LANDSCAPE SERVICE
MT. STERLING, KY.

PRODUCED BY THE NEW PHYTOTEKTOR SYSTEM

THE FULLY AUTOMATIC INTERMITTENT MIST METHOD WHICH ROOTS SOFTWOOD CUTTINGS IN SOIL.

BG—bed-grown Mo.—months old
F—field-grown X—transplanted
RC—rooted cutting S—seedling

Abelia Edward Goucher—X, F, 8 to 12 ins., 18c; 12 to 15 ins., 22c.

Abelia grandiflora—X, F, 8 to 12 ins., 10c; 12 to 15 ins., 14c; 15 to 18 ins., 18c; 2-yr., X, F, 18 to 24 ins., 30c.

Berberis julianae—X, F, 4 to 6 ins., 15c; 6 to 9 ins., 22c; 9 to 12 ins., 30c.

Berberis sargentiana—X, F, 6 to 9 ins., 15c; 9 to 12 ins., 20c; 2-yr., 12 to 18 ins., 30c.

Buxus sempervirens arborescens—X, F, liners, not bushy, 9 to 15 ins., 15c.

Chaenomeles (Cydonia)—Hybrid, upright, non-fruitlet, BG, not branched, 6 to 12 ins., 12c; 12 to 24 ins., 17c; colors—rich red and deep pink.

Euonymus fortunei carrieri—(True), X, F, 4 to 6 ins., 15c.

Euonymus japonicus—Large, RC, 8c.

Euonymus klatschovicus (Patens)—Large-leaved, RC, 6c; X, F, 9 to 12 ins., 15c; X, F, 12 to 15 ins., 30c; 2-yr., X, F, heavy, 12 to 15 ins., 25c; 15 to 18 ins., 35c.

Euonymus klatschovicus (Patens)—Small-leaved, good compact grower, erect, non-fruitlet, 6 Mo., RC, 6c; X, F, branched, 9 to 12 ins., 15c.

Ilex cornuta—Large, 8 Mo., RC, 8c; 1-yr., BG, 6 to 8 ins., 12c.

Ilex cornuta burfordi—Large, 7 Mo., RC, 8c.

Ilex crenata convexa—7 Mo., RC, 4 to 7 ins., 7c.

Ilex howardi—RC, 15c; southern type.

Ilex opaca—Northern types, not southern hybrids, guaranteed female and guaranteed male, from cuttings, 18 Mo., BG, Some lightly branched, 6 to 10 ins., 25c; for canning in gallon cans, 15 to 30 ins., 50c.

Ilex rotundifolia—Light, 8 Mo., BG, not branched, 7c, a wonderful value for growing on; 1-yr., BG, 4 to 6 ins., 12c; 2-yr., BG, extra heavy, bushy, will just fit a gallon can, 8 to 14 ins., 30c.

Ilex vomitoria femina—X, F, 6 to 9 ins., 20c; 9 to 12 ins., 30c.

Jasminum floridum and Jasminum nudiflorum—BG, 6 to 8 ins., 7c; 8 to 12 ins., mostly branched, 10c; X, F, 12 to 18 ins., 20c; 18 to 24 ins., 30c.

NOTE—All *Juniperus* 2-yr., from small, greenhouse type, cuttings transplanted to field.

Juniperus Andorra—X, F, 6 to 9 ins., 20c.

Juniperus pfitzeriana—Green, X, F, 4 to 6 ins., 15c.

Mahonia bealei—1-yr., S., suitable for potting, 6c.

Prunus laurocerasus officinalis (English Cherry Laurel)—RC, 10c; 7 Mo., BG, 5 to 10 ins., 17c.

Prunus laurocerasus schipkaensis (Hardy Cherry Laurel)—RC, 10c; 7 Mo., BG, 5 to 8 ins., 17c.

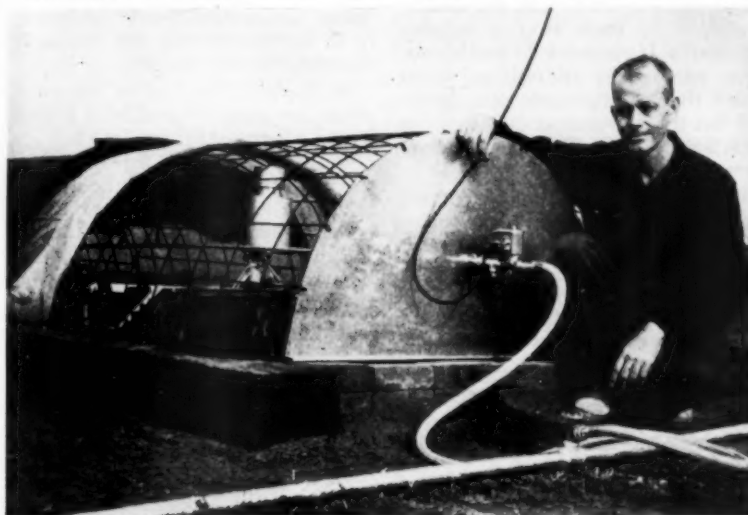
Viburnum burkwoodi—Own root, X, F, 8 to 12 ins., 20c; 12 to 18 ins., 35c; 2-yr., X, F, 18 to 24 ins., 75c.

Viburnum rhytidophyllum—RC, 10c; 7 Mo., BG, 4 to 6 ins., 17c.

FREE PACKING, liners in sphagnum moss and polyethylene plastic. Cash with order or 25% deposit, balance at time of shipment.

HARVEY TEMPLETON, JR.

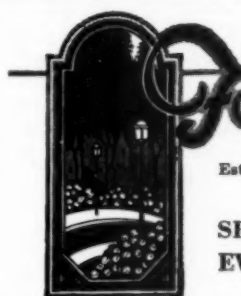
phylotektor.
U. S. HWYS. 64-41A
WINCHESTER - TENNESSEE



man and the other members were Joe Cravens, Cravens & Hawk Co., New Palestine, Ind.; Charles Lamb, Muncie Tree Surgery Co., Muncie, and Walter Dietsch, agronomist, Jefferson proving ground, Madison, Ind.

Another panel was held the following morning, concerning safety and utility line clearance, of which the moderator was Ken Daniels, safety engineer, Hartford Accident & Indemnity Insurance Co. With him on the panel were Charles Lamb; Clifford Smith, Superior Tree Expert Co., and Karl Kuemmerling, K. Kuemmerling, Inc., Canton, O. The conclusions of this panel will be reported in a subsequent issue, together with a summary of Karl Kuemmerling's comments on "Safety Practices of the Arborist," preceding the panel, as will the talk on "Practical Problems of the Arborist," by Paul Tilford, executive secretary of the National Arborist Association.

Concluding the program, Friday afternoon, was an informative talk by H. W. Gilbert, of Purdue University, on "Some Considerations in Selecting Good Shade Trees." He described the bases on which selections should be made and indicated the characteristics that are desirable in shade trees for transplanting.



J. R. Boyd, President John T. Boyd, Vice-president
H. B. Stubbinsfield, Supt.

FOREST NURSERY Co.

McMinnville, Tenn.

Established 1887

Long Distance Phone No. 234

Growers and Wholesale Dealers

**SHRUBS, FOREST and SHADE TREES,
EVERGREENS, VINES and CREEPERS**

Trade list mailed on request.

PINK DOGWOOD WHITE DOGWOOD

1, 2 and 3-yr.-old.

Evergreens
Broad-leaved Evergreens
Shade Trees
Flowering Crab Apples
Flowering Shrubs
Fruit Trees

Let us quote on your requirements.

HAWKERSMITH & SONS NURSERY
TULLAHOMA, TENN.

SPECIAL OFFER ON FLOWERING SHRUBS TREE SEEDLINGS—EVERGREENS—VINES COLLECTED

Acer rubrum (Red Maple)	Per 1000
12 to 30 ins., liners.....	\$17.50
Willow Oak (Quercus phellos)	
12 to 24 ins.....	22.50
Carpinus caroliniana (Hornbeam)	
Understock, grafting grade...	24.00
Hypericum densiflorum, yellow	
8 to 18 ins., S.....	12.00
Hydrangea, native	
6 to 18 ins.....	14.00
Sweet Gum (Liquidambar)	
8 to 18 ins., S.....	14.00
Hall's Japanese Honeysuckle	
12 to 18 ins., liners.....	9.00
Ilex opaca (American Holly)	
4 to 12 ins., S.....	16.50

See our other ad on page 72.

O. H. PERRY NURSERY CO.
Box 545
McMINNVILLE, TENN.



This Business Of Ours

Reflections on the Progress and Problems of Nurserymen

By E. Sam Hemming

NATURAL SEED DISSEMINATION

My father in a philosophical mood once imputed a reasoning power to plants, citing as an example the marvelous ability of plants to complete their reproductive cycle. Even if the ability is solely attributable to evolution, the study of plants' methods of seed dissemination is a fascinating subject.

Even the plants we propagate and grow so carefully often have strange and interesting methods of spreading their seeds. My father often studied the behavior of the deodara cedar in producing seeds. It, like so many other conifers, bears its seeds in cones, but, unlike the pines, the cones are collapsible. The cones are about the size of an average orange and as hard as a baseball, almost to the moment they shatter. When they do shatter, they collapse at the touch of a feather, the winged seeds fluttering to the ground like little helicopters.

Many of the conifers have winged seeds that float a long way in a light wind, and to give the seeds a good start some trees bear their cones in the very tops of the trees. On several occasions we have gathered seeds from three Nordmann firs about 100 feet high. The cones of these were always at the top. All of us have noticed a large old pine or spruce that has acted as a parent to seed an abandoned field or cutover woodland.

The conifers are not the only trees to bear winged seeds. The maples are particularly familiar to nurserymen and are all much alike in their production of seeds that whirl to the ground over a considerable area from the parent tree. The empress tree, or paulownia, is an exotic tree, but its winged seeds are so light that it has not only escaped from cultivation, but it is not uncommon to find a single tree deep in the woods.

Nature did not rely on developing just one method of seed distribution. In fact, other plants like the oaks and nut trees bear heavy seeds that drop like a plummet from a tree. These seeds are attractive to animals,

particularly rodents, and are usually scattered by them over a suitably large area. If one has ever had his nut crop attacked by squirrels he would think this a particularly poor method, but the tremendous spread of our oak forests testifies to its effectiveness.

The rodent is not the only animal depended upon for the distribution of seeds. The birds spread a much greater variety of the plants we normally grow. The native cedar, a conifer that bears blue berries, is a common and picturesque feature of the

fence rows of our countryside, where they have been sown by birds. In fact, a trip through a bird's alimentary canal almost is a necessity for the seeds' germination. Many of our showy berries are eaten and carried by birds, and one of the mysteries to me has been the place of bitter or distasteful berries in evolution. Birds will often leave until late winter the berries of certain plants until food is scarce and then finally eat them. Holly and dogwood are such plants. Taste a dogwood berry sometime; it is not poisonous, but certainly disagreeable and pungent.

Similarly, I have often wondered about the place of poisonous berries in the scheme of things. Do birds eat nightshade berries, for instance? Certain of the berries in the nursery are often left for migrating birds to come along and strip the plants. Robins in flocks will often do this. That would be a very effective method of disseminating seeds.

Still other plants do not depend

EVERGREENS

Wholesale Price List — To the Trade Only

Magnolia Soulangeana, Each
3 to 3½ ft. \$3.00

Euonymus Patens,
18 to 24 ins. 2.75

Ilex Cornuta Burfordi,
18 to 24 ins. 2.75

JUNIPERS (heavy sheared)

Pfitzer Juniper,
24 to 30 ins. 3.50

Blue Hetz Juniper,
30 to 36 ins. 4.25

GRAFTS

Keteleer Juniper,
4 to 5 ft. 5.00

Dundee Juniper,
3 ft. 3.00
3 to 4 ft. 4.00

TERMS: 5% discount when cash accompanies order. 2% discount when paid within 10 days after receiving invoice. Net 30 days.

All stock listed is dug B&B.

VISITORS INVITED

We can arrange for economical truck-load delivery.

ANNA NURSERY

F. G. Anderson, Prop.

Drawer 119, Anna National Bank Bldg.

ANNA, ILL.

Office Phone—340 Res. Phone—299R

DWARF BLUE-LEAVED ARCTIC WILLOW

(Salix Purpurea Nana)

Beautiful, new hedging shrub for all northern localities. Will thrive in practically any type of soil. Has fine-cut, bluish leaf and makes spectacular low-to-medium hedge. Should have full sun to develop to maximum attractiveness. 9 to 12 ins., 1-yr. stock, \$12.00 per 100. \$100.00 per 1000.

BEARDSLEE NURSERY PERRY, O.

Extensive Growers of



FRUIT TREES (also Dwarf)

SMALL FRUITS • NUT TREES

FLOWERING TREES

SHADE TREES • SHRUBS

EVERGREENS

HEDGES • VINES

All under irrigation. Large mechanical digger assures entire root system. New 95' x 160' cold storage, keeps stock in perfect condition. Visit our nursery and see the superior quality of our stock. Book orders now for Fall and Spring delivery.

Write for complete Wholesale Catalog with attractive prices

1955-OUR 60TH YEAR
Ozark SINCE 1895
NURSERY COMPANY

TAHLEQUAH, OKLAHOMA

Finest Quality
PERENNIALS and SHRUBS
Write for complete trade list.
KINGWOOD NURSERIES
MENTOR, O.

upon any outside force or agent to scatter their seeds, but have the power of dehiscence. Parts within the seed pod have the power to build up tension, which, when suddenly released, serves as a spring to throw the seeds some distance. My father used to be particularly interested in the gas plant, or dictamnus, which has this ability and used to annoy him, because the seeds would often disappear over night. All of us as children have probably played with the seed pods of balsam, or lady's-slipper, which also has this ability. The ability to dehiscence their seeds is fairly common to members of the legume family.

The seeds of other plants are hitchhikers, the common stickers and burs being examples. The mistletoe, in its highly specialized cycle, produces a berry coated with a viscous material that makes it easy for birds to carry to the crotch of some tree where it may grow.

Many of our seeds are water borne and are often carried considerable distances down rivers and across lakes and rarely even across seas. One curious seed adapted to watery surroundings is the lotus, or nelumbium species. Its seed, about the size of a marble, is heavy and sinks in the mud to germinate if it ever does, for it has the hardest coat of almost any seed I know. It seems to be waterproof and must stay in the water a long time before it will germinate. We tried some and did not succeed until we put the seed coat to an emery wheel. E. S. H.

HOLLIES IN SOUTHEAST

[Continued from page 14]

nurseryman, Denmark, S. C. English holly is being successfully grown at Atlanta, Rome and Ida Cason Gardens in Georgia. At Norfolk and Roanoke, Va., similar successes have been experienced. Not too successful results have been observed in eastern South Carolina and in the southeastern states. Early fall and late spring frosts are one of the factors limiting success with English holly in the area, he stated.

For successful growing of English holly in the southeast, five considerations were offered: Prepare planting pits similar to those used for pecan; plant in an eastern or northern aspect; plant near a body of water when possible; give special cultivation to variegated varieties; cut out 40 per cent of the sunlight in propagating and growing beds.

A resume of the growth of the Holly society from 44 members in 1947 to 600 and of the activities of

PEACH TREES

All commercial varieties

	Per 10	Per 100
3/4-in. cal.	\$0.75	\$0.70
1 1/16-in. cal. ....	.70	.65
9/16-in. cal. ....	.60	.55

FLOWERING CRAB APPLES

Hopa and Eley

2 to 3 ft. ....	.45	.40
3 to 4 ft. ....	.80	.75
4 to 5 ft. ....	.95	.85

WRITE FOR SURPLUS WHOLESALE LIST

SIMS FRUIT & NURSERY FARMS

HANNIBAL, MO.

HEAVY SHRUBS JUNIPER GRAFTS LINING-OUT STOCK SPECIMEN EVERGREENS

SNEED NURSERY CO.

P. O. Box 798

OKLAHOMA CITY 1, OKLA.

PINK FLOWERING DOGWOOD

Cornus florida rubra	Per 10	Per 100	Per 1000
6 to 12 ins., 1-yr.	\$ 6.00	\$ 50.00	\$ 400.00
12 to 18 ins., 1-yr.	8.50	75.00	650.00
18 to 24 ins., 1-yr.	12.50	100.00	900.00
24 to 30 ins., 1-yr.	15.00	125.00	1100.00
30 to 36 ins., 1-yr.	17.50	150.00	1350.00
3 to 6 ft., 2-yr.	30.00	250.00	2250.00
3 to 6 ft., br., bloom buds.	40.00	350.00	.....
4 to 5 ft., 2-yr.	30.00	400.00	.....
4 to 5 ft., br. bloom buds.	55.00	450.00	.....

Boyd Nursery Co., McMinnville, Tenn.

THE KENTUCKY JUNIPER GRAFTERS ASSN.

invites your inquiries for Juniper grafts and other liners. Upon request, we will gladly mail you a list of propagators in Kentucky, after which you may contact your favorite grower. Address inquiries to: NICK VERBURG, ANCHORAGE, KY.

COMMERCIAL

Nursery Co.
ESTABLISHED 1900

Decherd, Tennessee

MULTIFLORA ROSES UNDERSTOCK

Straight shanked seedlings grown especially for understock. Expertly graded to suit the most particular.

	Per 1000
4 to 6-mm. cal.....	\$27.50
2 to 4-mm. cal.....	17.50

Also available are the following grades for living fences, conservation plantings.

Cal.	Ins.	Per 1000
2 to 3-mm.	8 to 15	\$12.50
3 to 5-mm.	12 to 18	19.50
3 to 8-mm.	12 to 24	22.50
5 to 12-mm.	18 to 36	32.50

Write for special quotations on quantities of 10,000 or more.

The above prices are F.O.B.

Griggsville, Ill. nursery.

All tops cut back to 10 ins. at shipping unless otherwise requested.

NO PACKING CHARGE.

500 at the 1000 rate.

Our storage facilities are the best. ORDER NOW for delivery this winter or spring.



FARM LANDSCAPE CO.
Box 230
URBANA, ILL.

WE OFFER...

Our General Line of

SMALL FRUIT PLANTS

Let us quote on your requirements.

L. J. RAMBO'S WHOLESALE NURSERIES
Bridgman, Michigan

JUNIPERUS VIRGINIANA

(Red Cedar)

	Per 1000
6 to 9 ins., S.....	\$12.50
9 to 12 ins., S.....	17.50
12 to 18 ins., S.....	22.50

In lots of 10,000, 5% discount; in lots of 50,000 or more, 10% discount. No shipments made on this stock after April 10.

See our special offer on page 69.

O. H. PERRY NURSERY CO.
Box 545
McMINNVILLE, TENN.

ARMINTROUT'S EVERGREEN NURSERY ALLEGAN, MICH.

Seedlings—Transplants
Finished Stock
Send for price list.

two standing committees was presented by the secretary. The investigations into the qualities of varieties of holly being conducted by the variety selection committee are a continuation of the work begun in 1941 at the New Jersey agricultural experiment station. The committee on arboretums is now cooperating with five established arboretums in the United States to test the hardiness of holly plants.

The meeting was concluded with a conducted tour of the gardens and the propagating areas. The methods used and the materials under cultivation were examined by visiting nurserymen, including Mr. and Mrs. Tom Dodd, Jr., Semmes, Ala.; Mr. and Mrs. Wayne Asplin, Westlake, O.; Hugh Dunlap, Nashville, Tenn.; and Mr. and Mrs. William E. Bell, Cleveland, O.

OKLAHOMA CONVENTION

[Continued from page 18]

location of the garage and other construction is important to the finished design.

Mr. Roberts emphasized the importance of giving a customer the most correct and economical job that is possible for the amount he invests. But quality must never be sacrificed for economy, he said. Time spent in making drawings to illustrate what you have in mind is time well spent.

He said it is the responsibility of the landscape designer to plan with the residential architect for proper off-the-street parking, adequate drainage and other things the customer might not think of until it is too late.

A. A. N. Activities

Jim Lauden, of the Consolidated Nursery Co., Tyler, Tex., director of region 5 of the American Association of Nurserymen, spoke briefly Wednesday afternoon on some of the work of the organization, including A. A. N.'s efforts to promote the "Plant America" program.

Mr. Lauden said one of the principal aims of the A. A. N. is to promote appreciation for home property. Some of the results of proper planting, he said, are the increase in the value of homes and the beautification and comfort of homes.

Jack Jones, of Sarver's Nursery, Dallas, Tex., followed Mr. Lauden on the program, giving some timely suggestions on how Oklahoma nurserymen could set up their "Plant Oklahoma" program.

Judd Germany, of Fort Worth, presented up-to-date information on the use of fertilizers in growing nur-

PFITZER JUNIPER LINERS

TT, field, sheared	
8 to 11-in. spread	40c
11 to 14-in. spread	55c
14 to 16-in. spread	65c
6 to 8 ins., bands	14 1/2c
8 to 10 ins., bands	20c

BLUE HETZ JUNIPER LINERS

(Juniperus chinensis pfitzeriana glauca hetzi)

Heavy stock	
6 to 8 ins., bands	12 1/2c
8 to 10 ins., bands	16 1/2c

Express Co. has lowered our shipping cost.

All prices 300 or more total order. Less than 300, add 2c per plant. See our classified ad. Write for list.

Book your order for spring.

McININCH GREENHOUSES

ST. JOSEPH, MO.

POT-GROWN LINERS

To avoid disappointment contact us between now and September for your liner needs for 1955-1956 season.

We are sold out for this season.

JOHNSON'S NURSERY BAXTER, TENN.

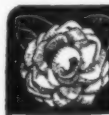


Azaleas, Camellias
and Magnolias
our
specialties.

Semmes, Ala.



• Abelia Grandiflora
• Hybrid Rugose Roses
• Nurserymen's Supplies
• Liners—complete list.
See Our Trade List.
CHASE NURSERY CO. CHASE, ALA.



SEMME'S NURSERIES

AZALEAS - CAMELLIAS
and other choice evergreens

Wholesale Catalog SEMMES, ALA.



FINISHED TAXUS

Liners and Bed Stock

Send for List.

EAGLE CREEK NURSERY
NEW AUGUSTA, IND.

SASANQUA CAMELLIAS

are fast gaining popularity. They are being planted everywhere in the south-east and as far north as Washington, D. C.

Don't let the boat leave you! Have a variety ready to sell. The demand will be greater each season. We have all sizes ready:

6 ft., specimen plants, B&B.	\$4.00 to \$6.00
(These will be in bloom in about 3 weeks.)	
3 to 4 ft., B&B, some buds.	2.25
18 to 24 ins., field-grown.	1.50
18 ins., well br., T.	.50
8 to 12 ins., liners, T.	.20
6 to 8 ins., liners, T.	.12
R.C.	.10

EAST COAST FLOWER FARMS
PINK HILL, N. C.

CANNED PLANTS

Build profits with Wight's container-grown evergreens. Wide assortment, including Ilex, Magnolia, Camellias, Pyracantha. Ask for wholesale list.

Wight NURSERIES CAIRO, GA.

TEUCRIUM CHAMAEDRYS

	Per 100	Per 1000
Top size	\$17.50	\$150.00
Medium grade	12.00	100.00
Well-rooted cuttings	5.00	45.00

BEARDSLEE NURSERY
PERRY, O.

ery crops at the Thursday morning session. Based on actual growing experience, Mr. Germany's remarks were well received, and he was kept busy for some time after the close of the session answering questions.

With the great variation in soils used by different nurserymen, it is often necessary to add some corrective for acidity and surpluses, he said. A lack of natural elements in the soil used for container-grown plants is best corrected by the addition of organic plant food, he said. He said that his firm preferred rotted sawdust or other comparable organic material mixed with the soil.

Mr. Germany stressed the importance of using great care in the selection of varieties of plants to be grown and the addition of organic plant food to secure top-quality plants with winter hardiness in both field and container-grown plants.

Entertainment

Many more women were in attendance at the convention than at other recent meetings. They almost filled the Oriental room, where their Wednesday luncheon was held. Mrs. Cy Higdon, assisted by Mrs. Warren Welch, arranged a floral centerpiece and had small gifts at all places for the guests. A book review entertained the guests.

At the banquet, Wednesday evening, Bruce Rey was master of ceremonies. Special guests were introduced. Two piano numbers were given by Claudia Rey, daughter of Mr. and Mrs. Rey. Dancing to the music of Mickey Reynolds' orchestra until a late hour completed the evening's entertainment.

A motion picture in color of some of the rose-growing operations in California of the Mount Arbor Nurseries, Shenandoah, Ia., was shown at the Wednesday session.

Awards

C. E. Garee, of the Noble Nursery, Noble, Okla.; Frank Sneed, of Sneed's Nursery, Oklahoma City; A. G. Hirschi, of Oklahoma City, and Philip Thomas, of Tulsa, all of whom had received the large bowl trophy in recognition of their long years of service to the industry, were presented with smaller trophies, which they may keep permanently.

Warren Welch, of Capitol Gardens, Oklahoma City, was named winner of the trophy as the outstanding nurseryman of the year. Merchandising methods and outstanding displays at Capitol Gardens have attracted considerable attention at the store on North May avenue for some time.

SURPLUS STOCK

<i>Abelia grandiflora</i>	Per 100	Per 1000
(Glossy Abelia), field-grown		
4 to 6 ins., C.	\$ 3.50	\$ 25.00
6 to 12 ins., C.	5.00	40.00
12 to 18 ins., 2-yr., C.	8.50	75.00
18 to 24 ins., 2-yr., C.	11.00	100.00
2 to 3 ft., 2-yr., C.	20.00	150.00

Hydrangea paniculata grandiflora

(Peegee Hydrangea)		
4 to 6 ins., C.	3.00	20.00
6 to 12 ins., C.	4.50	35.00
12 to 18 ins., C.	7.00	60.00
12 to 18 ins., 2-yr., C.	8.50	75.00
18 to 24 ins., 2-yr., C.	11.00	100.00
2 to 3 ft., 2-yr., C.	20.00	150.00

Spiraea vanhouttei

(Van Houtte Spiraea)		
4 to 6 ins., C.	2.00	15.00
6 to 12 ins., C.	3.50	25.00
9 to 12 ins., hedging...	5.00	40.00
12 to 18 ins., C.	5.00	40.00
12 to 18 ins., hedging...	6.50	55.00
18 to 24 ins., 2-yr., well-br.	11.00	100.00
2 to 3 ft., 2-yr., well-br.	20.00	.....

Cornus florida

(White-flowering Dogwood)		
12 to 18 ins., 2-yr., S.	4.00	30.00
18 to 24 ins., 2-yr., S.	5.00	40.00
2 to 3 ft., 2-yr., S.	6.00	50.00
2 to 3 ft., well-br.	35.00	.....
3 to 4 ft., well-br.	60.00	.....

NATIVE EVERGREENS

Collected stock

<i>Rhododendron maximum</i> , <i>Kalmia latifolia</i> , <i>Ilex opaca</i> , <i>Tsuga canadensis</i>	Per 100	Per 1000
3 to 6 ins., S.	\$2.50	\$20.00
6 to 9 ins., S.	3.50	30.00
9 to 12 ins., S.	5.50	50.00

CUMBERLAND PLATEAU NURSERY
RT. 1 CROSSVILLE, TENN.

SMALL FRUIT PLANTS

Grapes

Currants

Berry Plants

Write for Wholesale Price List

FOSTER NURSERY CO., Inc.
69 Orchard St. FREDONIA, N. Y.

STRAWBERRY PLANTS

	Per 1000
Albritton	\$11.00
Armstrong	10.00
Arrowhead	10.00
Blakemore	8.50
Dunlap	7.50
Empire	12.00
Fairland	11.00
Premier	12.00
Robinson	8.00
Tennessee Beauty	11.00

DOLLAR NURSERY
BLOOMFIELD, IA.

IF YOU SELL

by MAIL

by RETAIL

by DRIVE-IN



Get your wholesale catalog today!

Twenty-two pages packed full of items that can mean real profit for you: Strawberry plants, Perennials Store packages, Pyramid Gardens.

Don't delay—write today!

judson
WHOLESALE
nurseries
BRISTOL, INDIANA

CHINESE CHESTNUT TREES

Seedlings only of the Peter Lui strain. A surplus of small sizes due to drought conditions. Your inquiries invited.

LEELAND FARMS LEESBURG, GA.

FRENCH PUSSY WILLOW

(Salix Discolor Selection)

Beautiful February-foretelling strain. Catkin sheath is a rich mahogany-red with attractive large silvery-pink catkins when mature.

Root and top pruned liners, \$12.00 per 100; \$100.00 per 1000.
13 to 18 ins., \$25.00 per 100; \$200.00 per 1000.
BEARDSLEE NURSERY PERRY, O.



AZALEAS

Broad-leaved Evergreens and a general line of quality ornamentals.

THE TANKARD NURSERIES
EXMORE, VA.

WE SPECIALIZE IN FINE Azaleas and Camellias

Write for Catalog
FLOWERWOOD NURSERY
GREGORY L. SMITH, Owner
Rt. 1, Box 130 MOBILE, ALA.

Pronouncing Dictionary

of Plant Names and Botanical Terms

64 pages, 3000 names, 25¢ per copy

AMERICAN NURSERYMAN
343 S. Dearborn St. Chicago 4, Ill.

TENNESSEE'S 50TH

[Continued from page 9]

In addition, he said, there are seven television stations with a 30-minute program at night costing \$1,815 or \$94,380 a year for 52 programs. Thus you can see, he stated, \$100,000 to \$150,000 per year could be spent easily in this type of campaign. These figures, he said, will serve to illustrate why such a program would be too costly for the nurserymen's association. However, he added, a few nurserymen in the same town could get together in a cooperative advertising venture.

In Nashville, he said, there are 10 retail and two wholesale nurseries. A specific campaign advertising a few items, showing the price and telling the readers where they can buy the stock, would prove advantageous, he believed. The only general rule for advertising is that the copy be specific and interesting, truthful, offer good values and appear at the appropriate time.

Mr. Coggins said he visited several nurseries in Nashville and made the following observations: The location of several was poor, for impulse buying was being missed. Prices were not marked on the stock. People, he stated, are afraid to purchase something when the price is not clearly evident. Plain people would appreciate plain English. He suggested placing the common name of a plant below the Latin name. Retail nurseries should be made interesting so that people will want to visit them, he observed. Place information about trees, shrubs and plants in the sales yard and shop. Mr. Coggins concluded by saying that retail nurserymen need to extend their selling season even if they offer related items. Advertising can create new markets which nurserymen never knew existed.

Landscape Award

At the luncheon Monday noon, Vernon Marshall, Arlington, Neb., vice-president of the American Association of Nurserymen, presented a national industrial landscaping award to the Super Service Motor Freight Co., Nashville. He informed the representative of the company that his was one of 24 industrial concerns selected out of 54 entries to receive the A. A. N. award this year. For his design and execution of the winning planting, Richard H. Jones, Jones Ornamental Nursery, Nashville, received a similar award from Dan Gardiner, Boone-Gardiner Nursery Co., Louisville, Ky., president of the National Landscape Nurserymen's Association.

CHINESE CHESTNUTS

Hemming Strain Blight-Resistant
Trees

	Per 10	Per 100	Per 1000
12 to 18 ins.	\$2.50	\$22.50	\$200
18 to 24 ins.	3.50	32.50	300
2 to 3 ft.	6.00	55.00	500
3 to 4 ft.	7.50	70.00	650

Write for Trade List

EASTERN SHORE NURSERIES, INC.

Box 743

EASTON, MD.

LINING-OUT STOCK

	Per 100
Black Walnut, 18 to 24 ins., S.	\$ 6.00
Filbert, American, 18 to 24 ins., S.	20.00
Chinese Chestnut, 12 to 18 ins., S.	20.00
Chinese Chestnut, 6 to 12 ins., S.	15.00
Cedrus deodara, 2 1/4-in. pots.	20.00
Yew, Hicks', 6 to 8 ins., T.	30.00
Yew, Spreading, 6 to 8 ins., T.	30.00
Azalea, Corsage, 4 to 6 ins., T.	20.00
Azalea, Corsage, 6 to 8 ins., T.	30.00
Boxwood, American, 2-yr.	15.00
4 to 6 ins.	15.00
Boxwood, Dwarf, 2-yr., 3 to 4 ins.	15.00

Write for Complete Wholesale Price List

WAYNESBORO NURSERIES

WAYNESBORO, VIRGINIA

Packaged and Bare Root

ROSE BUSHES

Write For Wholesale List

**McCLUNG BROS.
ROSE NURSERY**

Route 1, Box 275-N Tyler, Texas

LYTHRUM

Heavy, No. 1 field-grown plants.

	Per 100	Per 1000
Dropmore Purple	\$12.50	\$115.00
Morden's Pink	15.00	140.00
Robert	22.50	210.00

Write for complete trade list.

KINGWOOD NURSERIES MENTOR, O.

Juniperus Pfitzeriana

	Per 100	Per 1000
Strong, rooted tip cuttings \$ 6.00	\$ 6.00	\$ 50.00
Heavy, 2 1/4-in. pot.	11.00	100.00

J. B. BEALLE

Box 924

GREENWOOD, MISS.

PROPAGATION OF PLANTS

By Kalina and McQueen.

Seed testing, layerage, division, separation, rooting cuttings, grafting, budding, stock and scion handling, nursery management and pest control. 687 p. (1942). Price, \$4.50, postpaid.

AMERICAN NURSERYMAN
343 S. Dearborn St. Chicago 4, Ill.

Dr. B. S. Pickett, head of the department of horticulture and forestry at the University of Tennessee, Monday afternoon reported that his department has been hard hit in loss of personnel the past year, and so little research work was done in ornamentals, although some was accomplished with fruit trees. This loss of personnel, he said, was discussed at the meeting with the farm bureau and so he hopes it can be corrected. Dr. Pickett related that the Tennessee Florists' Association set up a research committee the past year and in three months inaugurated five different projects in the university. Similar projects, he added, can be set up by the nurserymen if they express the desire.

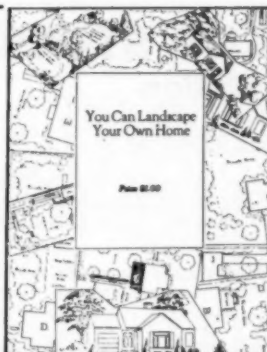
Plant Pest Act

The state entomologist, H. L. Bruer, reported that the new plant pest act has been passed by both houses of the legislature and as soon as it is signed by the governor it will become law. The state regulation of separately labeling collected nursery stock has eliminated many complaints which his office receives. This regulation is similar to one in Michigan, he stated, although a Michigan tag has to be secured from the department of agriculture if an order being shipped to Michigan is to be partially filled with collected nursery stock.

The highlight of the convention came on Monday afternoon, when the association scheduled four round-table discussion groups running at the same time. As the program lasted two hours, the nurserymen were able to visit each table and ask questions. Leading the discussion at the four tables arranged in each corner of the Commodore room were Robert Hillenmeyer, Hillenmeyer Nurseries, Lexington, Ky., whose subject was garden store selling; C. E. Kern, Wyoming Nurseries, Wyoming, O., who instructed the nurserymen on how and what to propagate; Bennett E. Brown, Knoxville Fertilizer Co., Knoxville, who talked on fertilizers and how to use them, and J. C. Hundley, executive manager of the Tennessee Rural Electric Cooperative Association, Nashville, who gave a talk on irrigation.

Garden Store Selling

Mr. Hillenmeyer stated that there are not any set rules for operating a garden shop, for they depend on the clientele and other circumstances. But, he added, adequate parking facilities are a necessity. In the lay-



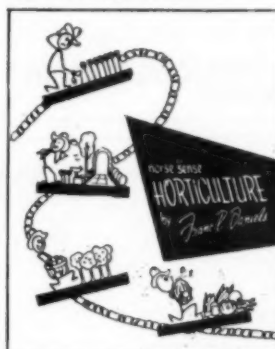
YOU CAN LANDSCAPE YOUR OWN HOME

Retails for \$1.00

A practical, understandable course in the rudiments of landscaping the small property.

Has the stamp of approval of over 1000 nurserymen and professional landscape men, who use it as a customer and sales help and for training their sales staff.

1 to 9 60c each; 10 to 24 50c each; 25 to 99 45c each; 100 or more only 40c each. F.O.B. Long Lake. For prepaid postage (Book rate) in lots of 10 or more add 1 1/2c each.



HORSE-SENSE HORTICULTURE

Retails for \$1.50

104 pages jam-packed with just the sort of information the gardener needs a hundred times a month. Tells not only HOW and WHEN, but also WHY.

A complete, up-to-the-minute short course in horticulture and gardening. 1 to 9 \$1.00 each; 10 to 49 85c each; 50 or more 75c each. F.O.B. Long Lake. For prepaid postage (Book rate) in lots of 10 or more add 2c each.

LISTEN, PLEASE!



WHILE WE DRIVE HOME THESE 5 POINTS

Spring's coming! Things will be popping through the ground.



Don't be caught asleep at the switch.



These two books will really work for you.



They'll bring home the \$\$\$\$\$\$ in good markup, training sales staff, and in helping your customers.

SATISFACTION GUARANTEED, or your money refunded.



OVER 1500 NURSERYMEN IN 43 STATES AND CANADA ARE USING THESE BOOKS PROFITABLY.

YOU'RE MISSING A GOOD BET IF YOU DON'T LET THESE TWO BOOKS WORK FOR YOU!

SPECIAL INTRODUCTORY OFFER:

A sample copy of each of these two books postpaid to you for only \$1.50.

ORDER COUPON

Please send me:

____ copies Horse-Sense Horticulture \$____ ea. \$

____ copies Landscape Book..... \$____ ea. \$

1 copy each of the above for \$1.50 Postpaid..... \$

Postage..... \$

Total enclosed... \$

Name.....

Address.....

THE MINNETONKA PUBLISHING CO.

400 Watertown Rd.
LONG LAKE, MINN.

HOLLAND NURSERY STOCK of every description



Grown, graded and packed to meet the requirements of U. S. A. import regulations.

Ask for beautifully illustrated trade list containing extensive assortments of **Azaleas, Rhododendrons, Shrubs, Conifers, Peonies, Phloxes, Bleeding Hearts** and other stock.

Our new race of **extremely hardy Rhododendrons** obtained highest awards at the Ghent Floralien, 1950, and Heemstede Flora, 1953.

FELIX & DYKHUIS—Boskoop, Holland

Growers and exporters of nursery stock for over 60 years.

The Homestead Nurseries H.G. Benckhuysen. Boskoop, Holland

Azaleas, Rhododendrons, Magnolias, Peonies, Ornamental Trees and Shrubs, Perennials—Quality Stock in All Leading Varieties. Trade catalog on request.

SEEDS

for the Nurseryman and Forester.
Write for catalog.

**F. W. SCHUMACHER, HORTICULTURIST
SANDWICH, MASS.**

SEEDLESS WATERMELON

BE FIRST TO OFFER PLANTS of amazing seedless melon pictured in Life magazine. Big new market for nursery-grown plants from home gardeners, roadside market growers and farmers. Originator's colchicine developed hybrid—delicious, sweet, bears 5 to 7 seedless table-size melons per plant.

Big nursery profit because seeds must be started in flats, benches or coldframes but transplant easily and bear fruit in 60 to 70 days. Amazing yield, premium fruit and novelty appeal make sales easy at 50c to \$1 per plant.

PRICES

1,000 seeds	\$70.00
500 seeds	40.00
100 seeds	10.00



INSTRUCTION HANDBOOK

for starting, transplanting, growing FREE with all orders or on request. Pollinator seeds (bear ordinary fruit) furnished free with all seed orders.

**AMERICAN
SEEDLESS WATERMELON
SEED CORP.**

Dept. AN, R. R. 1, Goshen, Ind.

TREE SEEDS

	1/4 Lb.	Lb.
Balsam Fir	\$1.50	\$ 5.00
Concolor Fir (80% cut)....	1.60	5.25
Norway Spruce	1.10	3.25
White Spruce, imported....	1.30	4.00
Colo. Blue Spruce, forest run	2.35	8.00
Colo. Blue Spruce, select blue	2.65	9.00
Austrian Pine (certified Austrian Alps)....	1.25	3.75
Red Pine (resinosa).....	4.00	12.50
White Pine	1.50	5.00
Scotch Pine, Riga	3.50	11.00
Scotch Pine, Denmark	1.50	5.00
Scotch Pine, Race Noble d'Auvergne (recommended to hold green color).....	1.40	4.75
American Arborvitae	1.50	5.00
Japanese Yew .....	.80	2.50

We pay postage on cash orders of \$10.00 or more, east of the Rocky Mts. No packing charge. Half pounds figured at pound rate. Delivery before spring planting time.

K. J. BRADEN

P. O. Box 187 MILTON, N. H.

SEEDS

Collectors of Tree, Shrub and Wild Flower Seeds

Crude Drugs and Ornamentals

E. C. MORAN, Stanford, Mont.

NEW PUSSY WILLOW SILVER CLAW

(Mutabilis Selection)

Excellent low-growing, extremely early-flowering variety. Catkins are long and slightly curved around stem when fully developed. Ideal florists' variety.

\$1.00 each.

BEARDSLEE NURSERY PERRY, O.

out of the Hillenmeyer garden shop, he said, a circular driveway surrounds the shop and lath area. Employing diagonal parking, 80 to 90 cars can be accommodated. The garden shop itself is located in the center of the lath area, so that people can be drawn into the building.

Neatness is most important, he emphasized. In slack periods or on rainy days the grounds can be tidied up.

Propagation

The old saying that what was good enough for my grandfather to grow is good enough for me no longer prevails in the nursery business, said Mr. Kern at the propagation round table. He passed out a list of plants which could be grown successfully in Tennessee, describing their growth, foliage, flowers and good and bad points. All of the materials discussed by Mr. Kern were broad-leaved evergreens.

With the change in the type of architecture, he pointed out, different types of plants have to be grown. No longer are 3-story homes built, but rather the split-level homes have come into prominence. Talking on trees Mr. Kern recommended Trident maple, Amur maple and paper-bark maple as varieties of maples to grow in Tennessee.

Fertilization

Mr. Brown, talking on fertilization, offered the following comments: Let a soil test be only a minor part of determining what plants need. Use good judgment and close observation, employing a complete, well-balanced fertilizer adapted to different plants. When irrigation is used, the amount of fertilization can be increased. Mr. Brown recommended fertilizing plants during the growing season and using more light applications instead of a heavy dose at one time.

Good practices should be used in growing stock, he emphasized, and fertilization should be one of these. A final observation made by Mr. Brown was that minor elements are just as important in plant growth as are nitrogen, phosphorus and potash.

Irrigation

Assisting Mr. Hundley in his discussion of irrigation were Tom C. Shirley, Dixie Irrigation Co., Louisville, Ky., and Dade A. Duke, Twin Lake Irrigation Co., Dickerson. In the course of the session the following points were brought out: One inch of water will irrigate sandy soil six inches deep, irrigating clay soil

deeper. In east Tennessee water is hard to find and nurserymen have to depend on ponds, creeks and rivers. In the western part of the state water can be obtained from wells. At the experiment station at Dandridge, 46 bushels of corn were obtained without irrigation, while 86 were obtained when an average amount of irrigation was used.

A rule for water is to use one and one-half times as much water per acre as the evaporation rate. To determine this, a pan of water can be placed in the field and when one inch of water evaporates, the land can be irrigated, using one and one-half inches of water. At Dandridge, at the experiment station, the rate for applying water was .22 inches per hour with the average watering being one to two inches for each application.

A. A. N. Chapter Meeting

In a brief meeting of the Tennessee chapter of the American Association of Nurserymen, Archie Cultra was elected president, while H. R. Potter, H. R. Potter Nursery, Joelton, was re-elected secretary-treasurer. As the delegates of the chapter have been reduced from three to two, Hoskins Shadow, Shadow Nursery Co., Winchester, was elected delegate to the A. A. N. convention for one year, while Jesse Tritschler, Tritschler's Greenhouses, Nashville, was chosen alternate. Elected a delegate for two years was Hubert Nicholson, while Charles Morse, Jr., Morse Bros., Chattanooga, was chosen as alternate.

Present Tree

Tuesday noon approximately 50 nurserymen visited the capitol grounds to witness the tree-planting ceremony. A 20-foot magnolia tree, being 25 years old, was donated by Boyd Nursery Co., McMinnville, to present to Gov. Frank Clement. After having to give up the site first selected on the capitol grounds because of the rocky formation encountered in digging the hole, the nurserymen approved a second location at which a hole was dug to house the 7-foot ball.

A dinner and dance was scheduled Monday night, with entertainment provided by the Melodiers, an all-girl singing trio, and stars from "The Grand Ole Opry," including the duke of Paducah. Orchid corsages were provided for all the ladies. After the banquet, Henry Homer Chase, Chase, Ala., the Grand Bow Wow, officiated at the Yellow Dog initiation.

7. H. Woodruff SEEDS



is **"SELLING SALES"**

F. H. Woodruff dealers' profits from lawn seed sales make business for us. That's why:

- ★ We have a selected dealership policy...to make sure each Woodruff dealer gets a fair shake at the demand in his area for Woodruff lawn seed and lawn food.
- ★ We're so careful about the quality of the lawn seed and lawn food we sell...and "custom blend" our seed mixtures to meet the country's varying conditions of soil and climate. That's why Woodruff customers are satisfied customers.
- ★ So many selling and merchandising aids are available without charge and we're glad to cooperate in advertising with Woodruff dealers.



Perhaps there's a dealership open in your area. If you'd like to discuss the possibilities, please write or phone us today.

**TURF-MAKER and MILFORD GREEN
LAWN SEED**

GRO-SOD 10-6-4 LAWN FOOD

Dept. AN2-5



F. H. WOODRUFF & SONS, INC.

MILFORD, CONNECTICUT

BRANCHES: • BELLEROSE, L.I., N.Y. • ATLANTA, GA. • TOLEDO, O.

• SACRAMENTO, CALIF. • DALLAS, TEX. • MERCEDES, TEX.

• SALISBURY, MD.

Please Mention AMERICAN NURSERYMAN When Writing Advertisers.

Maurice C. Ravensberg Boskoop, Holland

Reliable exporters for general nursery stock since 1922.

Catalog on application.

HEEMSKERK & CO., Bulbs WHOLESALE

**AMERICAN and HOLLAND
GROWN BULBS**

229 Oak St. RIDGEWOOD, N. J.

VUYK VAN NES BOSKOOP HOLLAND

Originators of Azalea Vuykiana.
Growers of choice Nursery Stock.

Please direct your correspondence to:
140 CEDAR ST. NEW YORK 6, N. Y.

WE OFFER

Hardy Azaleas, cut-leaved Japanese Maple and Rhododendron, lining-out stock.

Ask for our price list.

**W. J. SPAARGAREN
BOSKOOP, HOLLAND**

Northern California Institute at Davis

By Walter B. Balch

Nearly 200 nurserymen from the northern California area attended the third annual Northern California Nurserymen's Institute on the Davis campus of the University of California, January 26. Nearly all of the speakers were members of the staff of the university, some coming from the local campus, some from Berkeley and some from Los Angeles. The event, as in the past, was co-sponsored by the California Association of Nurserymen, represented officially by Don Perry, vice-president. Marston Kimball, extension ornamental horticulturist, University of California, was in charge of the affair.

The morning program was limited to formal talks. The afternoon sessions were question and answer periods, the group dividing into three sections and the speakers of the morning circulating at stated periods from section to section.

U. C. Soil Mix

Most of the subject matter concerned soil mixtures and fertilizers. "The U. C. Soil Mix," discussed by Dr. Philip A. Chandler, department of plant pathology; "Managing Soil Nutrition," by Dr. O. Ray Lunt, department of soils and irrigation, both from the Los Angeles campus, and "Source of Materials," by Marston H. Kimball, extension division horticulturist, were of great interest to the growers who were present.

The U. C. soil mix was developed by Dr. Chandler. He had had his early training in England, where such mixes apparently are quite common, and upon taking up his duties in California he concluded that a mix satisfactory for California might be beneficial to the growers. After a few years of experimentation he presented his original mix about three years ago. It since has been modified somewhat, and it was regarding the modifications that he spoke at this time.

The mix is primarily sand and peat or some other organic matter such as rice hulls, grape pumice and even shavings of some kinds of woods. Dr. Chandler seems to feel that, provided one has a sand of right grade or texture, the greater the amount of sand in the mixture, the better the results to be had. He feels that the primary mixture has several advantages, including the start with a material whose chemical constituents are known and will not

vary from year to year, ease of complete sterilization either with steam or chemicals and ease of control of added nutrients during the growing season. He regards the soil largely as a place where the roots can take hold, to support the plant, as a source of water and food which can best be added by grower as needed.

Although he indicated that all sand was the best medium, Dr. Chandler recognizes the practical inability on the part of the growers to get just what is needed and he compromises with the organics already mentioned. In general, he suggested that a bedding plant grower try to use as much as 75 per cent sand and he added that the greenhouse cut flower grower would do well to try to use that large a percentage of sand. The pot plant grower should, he feels, use not less than 50 per cent sand though he may go to only 25 per cent sand if conditions demand it. The only use for 100 per cent peat seems to be in the growing of such plants as azaleas or perhaps rhododendrons.

The sand must, of course, be salt-free and should be about 75 per cent fine sand with less than 15 per cent silt. In the primary mix, one adds to each cubic yard of soil one pound of treble superphosphate, one pound of potassium nitrate and six pounds of dolomite, from which one would get calcium and magnesium. Iron can be added later if it is needed. Under certain conditions potassium

sulphate may be substituted for the potassium nitrate and to this added about three pounds of hoof and horn if the soil is to be used a few days after sterilization. If it is to be allowed to wait a period of a week or more before using, the hoof and horn is added after the soil is placed into the containers and as the plants are set into it.

It was brought out during the day's discussions that in soil mixes which are allowed to stand for weeks before being used, the organics will break down, and it was further brought out that, contrary to popular belief, organic matter loses most of its nitrogen in about three weeks. As a result of this rapid loss of the nitrogen from the organics, the plants will get little if any of that material after about a month from this source.

Fertilizers

Using such a rather sterile medium for plant growing, it is obvious that there must be supplementary feedings of chemicals in the form of fertilizers, and it was this subject which was discussed by Dr. Lunt. Dr. Lunt

PATENTED HYBRID TEAS

	Quantity		
	No.	No.	
	1	1 1/2	Each
\$2.25 Charlotte Armstrong	200	40	\$1.12 1/2
2.00 Confidence	170	120	1.00
2.00 Eden Rose	250	40	1.00
2.00 Good News	100	100	1.00
2.50 Happiness	150	100	1.25
3.00 La Jolla	110	20	1.50
1.50 Mandarin	100	20	.75
2.50 Mardi Gras	140	40	1.25
2.25 Mission Bells	150	30	1.12 1/2
2.00 Mme. H. Guillot	180	130	1.00
2.50 Peace	300	100	1.25
2.00 Show Girl	110	80	1.00
2.25 Sutter's Gold	250	30	1.12 1/2
2.50 Symphony	100	220	1.25

PATENTED VARIETIES, FLORIBUNDAS

1.50 Betty Prior	150	30	.75
2.00 Carrousel	50	30	1.00
2.00 China Doll	146	55	1.00
2.00 Cocorice	100		1.00
1.50 Goldilocks	50	130	.75
2.00 Irene of Denmark	80	30	1.00
2.25 Ma Perkins	100	150	1.12 1/2
2.00 Vogue	180		1.00

PATENTED CLIMBERS

3.00 Charlotte Armstrong	100	30	1.50
2.50 Goldilocks	200		1.25
2.50 High Noon	250	40	1.25
1.75 Santa Anita	100	30	.87 1/2

Grown and sold with permission of patent owners. It is agreed they are to be sold at or above recommended retail prices. Grade No. 1 1/2 20% less.

Write today for complete list.

MAYWOOD ROSE NURSERY

JOHN CARRIGG
Rt. 2, Box 580
ROSEBURG, ORE.

MAHONIA AQUIFOLIUM

(Oregon-Washington Holly-Grape)

A very beautiful evergreen shrub with large, glossy leaves and yellow flowers conspicuously appearing in the spring and followed by dark blue berries; a most satisfactory broad-leaved evergreen for any place in the United States.

1-yr. seedlings, field-grown, row-run
\$35.00 per 1000; \$5.00 per 100.

TERMS—Check is requested before shipment, or will ship C.O.D. if preferred. All orders shipped same day they are dug, via railway express.

SORRY, NO PARCEL POST.

Place your order now for spring, 1955, delivery.

**CHENOWETH'S
MOUNT VERNON NURSERY**
MOUNT VERNON, WASH.

DEL RANCHO FORTUNA OFFERS California's Finest Strains in Flowering Trees

Each in units of 10... \$0.75
 Each in units of 10... \$0.65
 Each in units of 10... \$0.55
 Each in units of 10... \$0.50

FLOWERING PEACH

Early Double Red...	400	720	40	510
Helen Borchers...	130	20	30	120
Late Double Pink...	...	100	500	520
San Jose Pink...	210	500	430	240
White Double...	140	580	690	460
Royal Redleaf Peach...	220	490	105	350

FLOWERING APRICOT

Dawn...	20	90	70	40
Peggy Clarke...	10	100	150	90
Rosemary Clark...	...	20	130	170

FLOWERING PLUM

Prunus Pissardi...	220	...	...	40
Prunus Thundercloud...	...	...	...	370
Prunus Vesuvius...	...	30	430	650

Each in units of 10... \$0.95
 Each in units of 10... \$0.75
 Each in units of 10... \$0.60
 Each in units of 10... \$0.50

FLOWERING CRAB APPLE

Pyrus Arnoldiana...	20	50	160	60
Pyrus Eleyi...	80	190	90	10
Pyrus Floribunda...	...	...	50	60
Pyrus Hopa...	50	90	20	...

Each in units of 10... \$1.00

DWARF FLOWERING PEACH

Dwarf Variegated...	...	...	330	2-yr. old
Dwarf Red...	...	...	370	
Dwarf Pink...	...	...	470	
Flory Dwarf Edible...	...	...	510	

Each in units of 10... \$1.35 \$1.25 \$1.10 \$1.00

FLOWERING, EDIBLE PEACHES

Daily News 2-Star...	210	350	460	300
Daily News 3-Star...	610	960	700	290
Daily News 4-Star...	780	950	940	470

Each in units of 10... \$1.75 \$1.50 \$1.30

FLOWERING HAWTHORN 8 to 10 ft. 6 to 8 ft. 4 to 6 ft.

Paul's Scarlet...	200	540	320
-------------------	-----	-----	-----

Prices F.O.B. McFarland. Subject to prior sale.

Write us for special quantity rates for landscaping and canning.



P. O. BOX 548

Del Rancho Fortuna

(Located one mile south and two miles east of McFarland, Kern County, California)

McFARLAND, CALIFORNIA

Phone ... McFARLAND 81W



indicated that his suggestions would provide an optimum of growth, maintain plant nutrients in the proper ratio to each other and would maintain these ideal feeding conditions continuously. He recommended that one regularly make chemical analyses of the soil so that one will always be aware of the salt concentrations and its pH value. This can be done at the nursery or by a commercial laboratory. He added that in most cases where he had been called in regarding soil nutrition problems he had found the nurseryman had been using too much fertilizer or had not leached the soil regularly, and thus excess salts were causing most of the damage. Most plants, he said, grew best in a pH of 5.5 to 7 and were damaged if there was over .3 per cent of salts. (It should be remembered that the speakers consider all chemicals found in the soils, or added in fertilizers as "salts" and that sodium chloride, which is the common table salt, is only one of the salts found in soils and which when present in excess amounts will damage plants).

Fertilizing should be regular, and Dr. Lunt indicated that he would recommend frequent light feedings to less frequent heavy feedings. To use the fertilizer formula which he recommended once in two or three

YOU CAN PROFIT BY JOINING NOW!

American or Canadian nurserymen interested in joining the Canadian Association of Nurserymen should contact:

K. F. STENSSON
The Sheridan Nurseries, Ltd.
SHERIDAN, ONT., CANADA

**RHODODENDRON AND AZALEA
LINERS**
Quality only.

VAN VEEN NURSERY
3127 S. E. 43rd. Ave. PORTLAND 6, ORE.

weeks seemed to be his idea of the way to get the best results. The formula for a complete feeding as given by the speaker was: To each 100 gallons of water add one-half pound of potassium nitrate, one-fifth pound of ammo-phos (11-48), one-half pound calcium nitrate, one-third to one-half pound magnesium sulphate, one-quarter pound urea (46 per cent) and chelated iron, if needed, two thirds of an ounce.

Since these are all compatible, he suggested that for the first feedings to the U. C. mix one use the entire

"VISI-PAK"

The Modern Bulbs Package
— with BUY APPEAL

GLADS, DAHLIAS, and many other bulbs pre-packed in aeriated polyethylene bags with full color labels. Hides nothing—clearly shows size and quality of bulbs.

Price list now ready.

Also ask for

"Stassen Bulb Sales Plan."



STASSEN
FLORAL GARDENS INC.
ROSLYN HEIGHTS, N. Y.

GRAPE CUTTINGS

Concord, Delaware and Niagara

State Inspected

Wire-bound, 100 per bunch.

\$6.00 per 1000

Cash or C.O.D. Order at once. Start cutting December 1.

PAW PAW PLANT CO.

PAW PAW, MICH.

CERTIFIED BLUEBERRY PLANTS

Per 100 Per 1000

1-yr., rooted cuttings... \$ 8.00 \$ 70.00

6 to 12-in. plants... 15.00 135.00

F.O.B. 15 Varieties

A. G. AMMON

Box 14 CHATSWORTH, N. J.

DOTY & DOERNER, Inc.

6691 S. W. CAPITOL HIGHWAY
PORTLAND 19, OREGON

WHOLESALE

GENERAL NURSERY STOCK



MAHONIA AQUIFOLIUM

Oregon Grape

Pot-Grown Liner Stock

2 1/4-in. pots, **\$15.00 per 100**

Order Now for immediate or spring delivery



Our monthly catalog shows laid-down prices to your door. Over 500 varieties now available. Write for your free copy!

mn Monrovia Nursery Co.

P. O. Box 196, MONROVIA, CALIFORNIA

MILTON NURSERY CO.

C. Bert Miller, President

MILTON - 75 Years - OREGON

Flowering, Ornamental and Shade Trees

Fruit Tree Seedlings and Angers Quince Rooted Cuttings

Combination carlots for eastern distributing points during shipping season.

Write for our Trade List.

RICH & SONS NURSERY

Offers

SHADE TREES

Green Ash
Cutleaf Birch
White Birch (European)
Chinese Elm
Paul's Scarlet Hawthorn
Honey Locust
Red Maple
Silver Maple
Russian Mulberry
Flowering Plum
Poplars
Willows

Azalea Mollis

Prunus Besseyi, bushy, 2 and 3-yr. plants

ROSES

Many other items.

RICH & SONS NURSERY

Rt. 4

HILLSBORO, ORE.

Order Now.

TREE PEONIES

1-yr. grafts.

LAKE SAMMAMISH EVERGREEN NURSERY

Rt. 1, Box 79 EAST STANWOOD, WASH.

WE SPECIALIZE IN LARGE TREES

Regular transplanted. Rare stock. Free of noxious weeds. In the business to stay.

F. A. DOERFLER & SONS

250 N. Lancaster Dr. SALEM, ORE.
Phone 22549

DARLING'S
"Rite in the Rain".
WATERPROOF TREE AND PLANT LABELS

"Rite in the Rain" labels are not just another paper label. They are made of tough tagboard and chemically treated to make them waterproof. Ordinary pencil markings do not wash off. These are longer lasting yet low cost labels. Millions are used every year by nurserymen.

Write for samples and prices.
J. L. DARLING COMPANY
BROWN'S POINT, TACOMA, WASH.

formula. Then, as time went on, if one's chemical studies showed there was no need for one or more of these materials he could leave them out of later feedings until they were required again. While Dr. Lunt seemed to favor the liquid method of application, he said that if one did not have a satisfactory dispenser, the materials could be added in dry form. He seemed to indicate that he felt one is more likely to have fertilizer burn from dry applications and, of course, it is generally recognized that liquid feeding is less costly, for one is spared the labor costs of application when the foods are applied while irrigating.

Sources of Materials

Professor Kimball told of his surveys of the state for sources of the sand which is desirable for the U. C. mix. He has learned that, rather than only a few isolated sources, there are many and in general they are rather well scattered throughout the state. He reported on a few of the sources, and he advised the group that as soon as the survey is completed, reports will be given the farm advisors in each county and that the growers may have the information from that source.

Water Supply

Prof. Warren Schoonover, extension soils specialist, U. C., Berkeley, gave a rapid fire report on "Your Business and Water Supply." He said that water as it comes from the ground seldom contains too much salt. Excess salts, it seems, build up in the soils because of draining out of the water and leaving behind the salts, of water losses due to evaporation and water uses by the plants. Excess salts build up faster in sandy soils than in silts or clays. There are areas in the state where one will find water containing excess amounts of boron. To reduce the possibility of excess salts use more water. This is to be done even if the original water contains large amounts of salts, for the generous use of water pushes the excess salts out of the soil by mechanical means. He said, too, that the pH readings of the water are of no value, for there is no buffering in water and the results are unimportant until the water is in the soil. He said that drainage is important in all watering and there is no good drainage in either a raised bench or a pot even if gravel is used in the bottom of the pot or bench.

Air Pollution

There was a short talk on "What Is Air Pollution?" In his remarks

Dr. Albert Paulus, extension plant pathologist, explained what is now known about air pollution and what gases were responsible for it. His series of colored slides showed the damage done to several cut flower and vegetable crops by air pollutants, and from these slides one was able to conclude that there is a varietal difference in susceptibility to smog.

Channing Jones, California Spray Chemical Company, Richmond, gave a valuable talk entitled, "Today's Merchandising Problems." It is his feeling that in California there is no let-up to the prospects of success in business. He said that it is expected that there will be about 100,000 new homes built in the state each year for the next five years and that the nurseryman will feel the effect of building two or three years after the homes are occupied. Until that time he feels that most of the funds in the family will be used for other purposes than gardening and planting.

To do better as nurserymen he suggested his hearers pay more attention to the dry goods they handle than they now do. He feels an increase in volume rather than an increase in prices is the way to more profit, and the way to get more business is to get more people into the store or nursery and then treat them right. To get them in, he asserted one must advertise, and he seemed to have no personal preference as to the medium. The store should be located where there is plenty of traffic, and when the buyers come in, they should see a clean, properly lighted store, with well arranged island displays and with well trained personnel. He recommended staff meetings in which instruction was given in the products of the store either by a member of the organization or manufacturers' representatives. He suggested bonuses to those of the staff who moved slow moving merchandise. Inventory control was highly recommended, and the fast disposal of items which were staying too long was advised.

Agricultural Education

Agricultural education in the United States was discussed by Fred N. Briggs, dean of agriculture at Davis. He traced it from the establishment of two or three agricultural colleges about 100 years ago, through the establishment of the land grant colleges in the Lincoln administration and up to date. He noted that while other types of learning were patterned after the European schools and colleges, the agriculturists had to start from scratch, for nowhere else in the world had that science

... for MORE sales
... for LARGER sales

Stribling's
GROWING  QUALITY

SHADE TREES

Among the 36 commercial varieties we grow on our 800 acres...

European Sycamore and Modesto Ash

Capitalize now on our exceptionally fine selection of these two perennial favorites. Both varieties are available in large quantities... in your choice of 6 to 8, 8 to 10, 10 to 12 and 12 to 14-ft. sizes.

FLOWERING TREES

We have a great variety of choice including a featured line of...

Flowering Plum

Prunus pissardi—white tinted pink
Prunus hollywood—light pink flower, good fruit.
Prunus bireiana—double soft pink
Prunus thundercloud—dark foliage, white flower

Flowering Peach

Double Early Red
Double Early Pink
Double Late Red
Helen Borchers—very double pink
Candy Stick—variegated
Double White

Also S-37* Rootstock

A must where soil nematodes hamper fruit production.
For extra sales this year—write, wire or phone

* T.M. Reg. U. S. Pat. Off.

Stribling's
NURSERIES

P.O. Box 793

Merced, California

Ph. RANDolph 2-4106

(Office and Sales Yard on 99 Highway North)

PACIFIC COAST NURSERY

2244 N. Shiloh Ct.

PORTLAND 11, ORE.

Pioneering Seedling Growers on
the Pacific Coast Since 1914.

Specializing in Fruit Tree Seedlings and
Shade and Flowering Trees.

French Apple Seedlings, Str. and Br.
Domestic Apple Seedlings, Str. and Br.
Bartlett Pear Seedlings, Str. and Br.
Usuriensis Pear Seedlings
Mahaleb Cherry Seedlings
Maxard Cherry Seedlings
Myrobalan Plum Seedlings
American Plum Seedlings
Angers Rooted Quince Cuttings
English Privet Cuttings

John Holmason & Sons, Props.

FOR THE BEST IN CACTUS AND SUCCULENTS

WONDER COLLECTION: One
hundred all different.

\$5.00 per 100, \$45.00 per 1000.

CANADIAN SPECIAL: More
durable kinds, 20 varieties.

\$5.00 per 100, \$45.00 per 1000.

SUPER SELECTION: Largest from
the shipping flats.

\$10.00 per 100, \$90.00 per 1000.

HUMMEL'S EXOTIC GARDENS

Rt. 1, Box 900

CARLSBAD, CALIF.

TREE ROSES

Ready Now! Four-budded tree roses with well-developed heads on strong 36-in. stems.

	No. 1 Grade	Each
Under 100	\$2.15
100 or more	2.05
250 or more	1.95

*Patented varieties 35c additional, except Queen Elizabeth, Jiminy Cricket and Tiffany, which are 50c additional.

*No. 1 1/2 (Medium) grade 20 per cent less. Please order in multiples of five.

PATENTED	QUANTITY AVAILABLE		NONPATENTED	QUANTITY AVAILABLE	
	No. 1	No. 1 1/2		No. 1	No. 1 1/2
Bravo	—	30	Autumn	—	15
Capistrano	—	15	Duchessa of Atholl	60	—
Charlotte Armstrong	300	130	Duchessa de Penaranda	10	10
Fashion	—	30	Elipse	25	—
Forty Niner	270	70	F. K. Druschki	60	—
Grande D. Charlotte	100	35	Fresham	—	10
Helen Traubel	75	70	Hinrich Gaede	90	15
Kath. T. Marshall	—	20	J. Otto Thlow	105	10
Jiminy Cricket	70	120	Lady Forteviot	15	—
Lilibel	85	—	McGredy's Ivory	45	60
Ma Perkins	110	24	McGredy's Yellow	25	10
Mirandy	—	10	Mrs. E. P. Thom	50	—
Mission Bells	140	10	Mrs. P. S. Dupont	200	10
Mme. H. Guillot	80	30	Mrs. Sam McGredy	—	10
Mojave	20	110	Picture	190	—
Nocturne	25	20	Pres. H. Hoover	—	25
Peace	20	130	Tallman	90	—
Queen Elizabeth	665	75			
Tally-ho	—	10			
Tiffany	540	290			
Vogue	15	—			

Bush and Climbing Roses

Patents and nonpatents—write for surplus list.



W.B. Clarke & Co.



P. O. BOX 343
SAN JOSE 3, CALIF.

SEND FOR YOUR NEW
FULLY ILLUSTRATED CATALOG

IT'S NEW

TABLE
MODEL
TREE STAND

6-POT SIZE

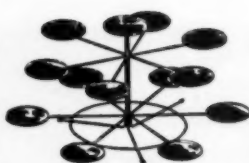
\$3.00 each

12-Pot SIZE

\$5.00 each

18-POT SIZE

\$8.25 each



ORDERS DELIVERED FREE TO DESTINATION AS FOLLOWS:

CALIFORNIA—All orders \$25.00 and over.

ARIZONA - NEVADA - OREGON—Orders \$35.00 and over.

ALL OTHER STATES WEST OF MISS.—Orders \$50 and over.

ALL STATES EAST OF MISS.—Orders \$75.00 and over.

CONTAINS HUNDREDS OF ITEMS
THAT MAKE MONEY FOR YOU!

Wire and Redwood baskets; Redwood tubs;

Wire and fernwood totom poles;

Plant Supports;

Wrought-iron brackets and fern stands;

Plastic and lead flower pin frogs;

Can cutters;

Green moss in bales and bags;

Black Magic; Plant ties and twine;

Plastic pots and trellis;

Copper, brass and plastic planters;

Wire plant markers and plastic plates;

Other nursery supplies.

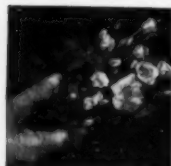
CATALOG IS FREE—SEND TODAY

WIRE BASKET CO.

921 E. Redondo Blvd.

INGLEWOOD, CALIF.

Phone ORchard 7-9022



MINIATURE ROSES

Best varieties
including:

PATTY LOU—rose bicolor.....50c

CENTENNIAL MISS—red.....35c

PINK JOY—pink.....35c

—and the new everblooming climbing

miniature, PINK CAMEO.

From 3-in. pot.....\$1.00 each

Illustrated Folder Free
Moore Miniature Roses

Sequoia Nursery, Visalia, Calif.

Jan de Graaff's

OREGON BULB FARMS

P. O. Box 512

GRESHAM, OREGON

Lilies

Daffodils

Iris

been so taught. He called attention to the fact that agricultural teaching had reversed the normal process in that it started in the higher institutions of learning and worked down till now it is taught in junior colleges, state colleges and high schools in California. He summarized by adding that the United States provides more of such education than does any other country in the world.

Except for the campus tours in the afternoon no new subjects were taken up. On the tour the several groups seemed most interested in the mist propagation work being done. By this method of providing continuous moisture in the air over cuttings which are being rooted, it has been possible to shorten the rooting period and in some cases to root kinds of plants usually thought impossible of propagation by this method. Most of the work is being done in an effort to secure root stocks of fruit trees which are resistant to nematodes or other pests, but the principles involved are being used for other purposes by nurserymen over the state.

Two important factors in this method of propagation mentioned were that 24 hours per day of misting is less satisfactory than daylight only misting; that best results are obtained when hormones are used before putting the cuttings in the sand and that solutions rather than dry hormones are to be preferred under the conditions prevailing at Davis.

F. L. Dinwiddie, Valley Garden Nursery, Woodland, had been co-ordinator of the meetings, and he was warmly congratulated by the nurserymen on the selection of the subjects on the program, the speakers who had presented the material and the excellent arrangements that had made the institute proceed so smoothly all day long. W. B. B.

LOS ANGELES GROUP MEETS

Discussion of the various phases of the handling and merchandising of bare-root stock attracted an overflow crowd of nurserymen to the meeting of the Los Angeles chapter of the California Association of Nurserymen, at Arcadia, January 26.

Prepared questions concerning problems of the retailer during the bare-root season were directed by the moderator, Charles S. Crum, general manager of Rosedale's Nurseries, Monrovia, to a panel of four nurserymen drawn from both the wholesale and retail fields.

Representing the wholesale fruit and shade tree grower was Virgil

E. Cripe, general manager of Del Rancho Fortuna, McFarland; wholesale rose growing, Henry A. Conklin, West Covina, and retailer, Carl H. Zangger, until recently manager of Tuttle Bros. Nurseries, Altadena. Wilbur Korsmeier, proprietor of the Town & Country Nursery, Whittier, spoke for the small retail group.

Problems of the field harvesting, handling from the field to the retailer, presale pruning, improvements in varieties, sales trends and packaging of the bare-root material were thoroughly explored. Pruning demonstrations by Mr. Cripe and exhibits of bare-root rose packaging methods provided the 133 members attending with visual information.

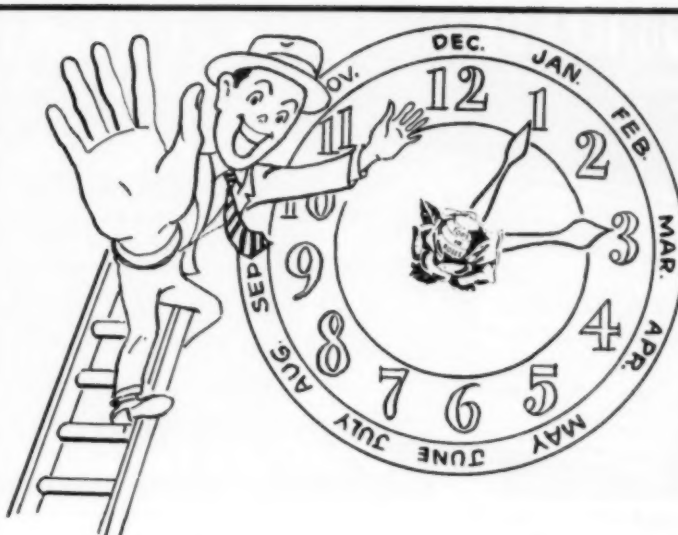
A highlight of the meeting was the presentation by President O. L. Weeks, Weeks Wholesale Rose Grower, Ontario, of the chapter's traditional certificate of merit to Ed. McNeil, Tuttle Bros. Nurseries, immediate past president, in recognition of his service during 1953-54.

An interesting plant forum was presented by Ralph Klages, Coolidge Rare Plant Gardens, Pasadena, and Ernie Bordier, Bordier's Nursery, Covina. They displayed and discussed foliage samples of *Dodonaea viscosa*, a colorful tropical shrub; *Ficus benjamina*, a pendulous tree shrub; *Chamaedorea elegans*, a dwarf ornamental palm for the shade, and the spreading evergreen, *Aralia chinensis*. According to Mr. Bordier and Mr. Klages, all can be successfully grown in southern California.

Questions submitted to the panel included the sales trend in roses, success of dwarf bare-root fruit trees, improvements in bare-root understock, effect of refrigeration on fruit and shade trees, best procedure in the use of fertilizers while planting bare-root roses and success of planting three trees in one hole.

Mr. Cripe demonstrated the proper pruning method with a bare-root peach tree, pointing out the normal reluctance of the average nurseryman to prune heavily enough to compensate for the loss of roots in the digging process.

Highlight of the discussion was the exhibits of the packaged roses. Mr. Conklin displayed the package he introduced three years ago, which he said proved unsatisfactory when exposed to weather. His current package, a treated cardboard, covering the roots only and leaving the canes exposed, will maintain the plant in good condition for three months, he stated. The roots are packed in a combination of peat



THERE IS STILL TIME TO ORDER



BUSHES — CLIMBERS
SHIPPING NOW TO EARLY MARCH

ALL INQUIRIES PROMPTLY ACKNOWLEDGED.

WEEKS WHOLESALE ROSE GROWER

O. L. WEEKS

926 W. ELY, ONTARIO, CALIF.



EVERGREEN LINING-OUT STOCK

Conifers • Azaleas • Heathers

Write for catalog.

MITSCH NURSERY

AURORA, ORE.

Wholesale Propagators and Growers of Evergreen Liners

CLEMATIS SPECIAL

Jackman Kubra, red
E. Markum, red
Montana rubens

Montana alba
Ramona
Henry

M. Koster
Nelly Moser

All 50¢ each when cash accompanies order. Postpaid.
Guaranteed absolutely no nematode-infested plants.

PORTLAND CLEMATIS NURSERY

1312 S. W. Taylors Ferry Rd.

PORTLAND 10, ORE.

PORTLAND WHOLESALE NURSERY CO.

5050 S. E. STARK ST.

Avery H. Steinmetz
Paul E. Van Allen

PORTLAND 15, OREGON

We have a good supply of:
 Birch, Cut-leaved Weeping and European
 White
 Box Elder, Silver Variegated.
 Catalpa, Speciosa.
 Elm, Chinese.
 Hawthorn, Paul's Scarlet.
 Locust, Globe, top graft.
 Maple, Norway and Schwedler, whips.
 Maple, Silver. Mountain Ash, European.
 Oak, Pin and Red. Poplar, Lombardy.

Quality Stock

CONIFERS AND BROAD-LEAVED
 EVERGREENS
 SHADE AND FLOWERING TREES
 FRUIT TREE SEEDLINGS
 FRUIT TREES
 DECIDUOUS SHRUBS
 VINES AND BULBS
 PORTLAND ROSES
 NURSERY SUPPLIES

Write for our Catalog



We pay shipping costs on lining-out stock to all points in the United States, Canada and Alaska. No packing charge is made on either lining-out or balled stock.

SHERWOOD NURSERY CO.

EVERGREENS - Propagators & Growers

Wholesale Only

141 S.E. 65th Ave., PORTLAND 16, ORE.

ROSES OLD and NEW

Fine-quality, two-year plants
 budded on Multiflora in over
 250 varieties.

Send for list.

MT. HOOD NURSERY

Rt. 2, Box 96

GRESHAM. OREGON

ROSES — Field Grown

Patented and Nonpatented.
 Finest in roses since 1935.
 Write for new list and prices. Contracts
 and advance orders solicited.

PACIFIC NORTHWEST ROSE NURSERY

P. O. Box 261 GRESHAM, ORE.

ROSEMARY WILLOW

(Salix Rosmarinifolia)

Very attractive fine-textured specimen shrub.
 Long narrow linear leaves, bluish-green above,
 white underneath. Stems rich mahogany. Com-
 pact upright growth.

Available in 1-yr. stock only.....\$1.00 each.
BEARDSLEE NURSERY PERRY, O.

A. MCGILL & SON

FAIRVIEW, ORE.

Wholesale only

FRUIT TREE SEEDLINGS
 FLOWERING ORNAMENTAL TREES
 SHADE TREES

Constant Vigilance Results
 in Quality Stock

Combination carloads to eastern
 distributing points.

Write for our List.

Eastern Representative:

Frank C. Donovan
 130 E. 233rd St.
 Euclid 23, O.



4228 N.E. 77th Avenue • Portland 13, Oregon

Finest Quality

CAMELLIAS — ROSES RETICULATAS — HOLLY

(Northern California Grown Roses)

DESCANSO DISTRIBUTORS, INC.

Wholesale Growers

Pipeline & Walnut Sts., CHINO, CALIF.

EVERGREEN LINERS

Rhododendrons Camellias
 Azaleas Andromeda Conifers

Send for List

J. B. WHALLEY
 Rt. 2, Box 212 TROUTDALE, ORE.

moss and old shavings, and the rose can be planted, box and all. Further experimentation is necessary, he said, to reduce the weight for shipping purposes, since the single packaged rose weighs about three pounds. He adds an additional 15 cents to the wholesale price for the packaged rose.

Mr. Crum displayed the packaged rose that is marketed by Rosedale's Nurseries which is similar to the one in use this year by Armstrong Nurseries, Ontario. This type employs the polyethylene bag, covering the entire plant with no packing medium around the roots in addition to an ornamental box enclosing the roots. Mr. Crum and Jack Story, Armstrong's Nurseries, stated that a plant packed in this manner remains in good condition almost indefinitely. Both said that their firms would continue this forward step. The value of the sales appeal of the package to the customer is extremely noticeable, Mr. Story indicated.

Ed. McNeil

ADVERTISING MAIN TOPIC OF OREGON MEETING

Advertising was the major topic on the opening day of the midwinter meeting of the Oregon Association of Nurserymen, at Portland, January 20 and 21. The first address was on an unusually "hot" topic among nurserymen in that section of the country at the present time, "Truth in Advertising." The speaker was Jean T. Callahan, advertising manager of the Oregonian's Northwest rotogravure magazine.

Truth in Advertising

"Bad advertising results in bad publicity, which in turn is bad for the cash register," Mr. Callahan said. He urged members of the nursery profession to assist newspapers, magazine, radio and television mediums to uncover "gyp" claims.

He pointed out that reputable newspapers throughout the country have rejected advertising copy from firms when evidence indicated they were out of line in making fabulous claims. He indicated that all newspapers have a vital interest in policing such accounts because they jeopardize readers' confidence in the paper, which in turn reflects on results for known reputable advertisers.

As a possible solution, Mr. Callahan suggested the association appoint a public relations committee to work with newspapers in this field. He further encouraged the association to appoint a member to join the

Oregon Advertising Club and work with the latter group in solving the problem.

He invited nurserymen to bring in evidence of false advertising claims on the part of advertisers in an effort to clear up the situation. Following Mr. Callahan's talk, James Doty, president of the Oregon association, urged members to consider the advisability of following his recommendations.

Merchandising

Two topics were covered on the second day, when the nurserymen were told how to become better merchandisers and increase their profits and how to comply with the provisions of the revised social security law.

On the first subject, they heard from two speakers, Alan James, president of the Oregon Florists' Club, and Fred C. Trullinger, Portland seedsman.

Mr. James outlined the successful co-operative advertising program now being conducted by the florists, pointing out that such group promotions do not take the place of individual advertisements. He praised the nurserymen for their enthusiastic plans for participating in the spring flower show at the Gresham fairgrounds.

Mr. Trullinger pointed out that home gardeners expend in excess of \$1,500,000,000 each year on their hobby, exclusive of commercial operations. He indicated that while the spending was going on, the nurserymen were failing to get their share.

As a means of increasing their sales, they were encouraged by Mr. Trullinger to have a retail store outlet set up on a quick-service basis, maintain well-lighted, clean and seasonally appropriate displays of their merchandise, take advantage of national advertising campaigns relative to products they are selling and otherwise improve their public relations program within the store itself.

Officers Elected

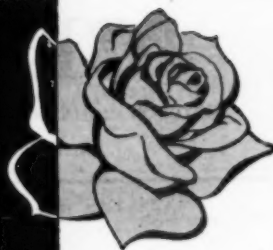
The two-day meeting concluded with an election of officers, naming W. P. Nuffer, president; Melvin Surface, first vice-president; Paul Van Allen, second vice-president, and Mrs. Martha Walker, secretary.

Following adjournment of the state meeting, chapter 12 of the American Association of Nurserymen met in a brief session to elect new officers as follows: James A. Doty, president; W. P. Nuffer, vice-president, and Paul Van Allen, secretary-treasurer.

H. H.

P & D ROSES

Budded on a
SUPER STRAIN of
Multiflora Root Stock



**HARDIER, MORE
LUXURIANT BUSH**

THRIVE under
any reasonable
growing conditions

FAR LESS DAMAGE
to roots when
handling...

Each P & D Rose is budded to an exclusive super strain of multiflora root stock developed after 20 years of selective growing.

EXTRA SERVICE: Each bush is individually top tied and labeled.

Complete selection of A.A.R.S.
Roses Available

**WRITE FOR OUR
LATEST LISTS**

OREGON'S BEST SOURCE OF GOOD ROSES
"THE FINEST ANYWHERE"



**A.A.R.S.
MEMBER**

PETERSON & DERING
ROSE GROWERS
SCAPPOOSE, OREGON

R_y for Year-Long Happiness

Quality Stock
Satisfied Customers
Increased Business

YOU CAN HAVE THEM ALL

IF YOU CARRY



ELMER ROSES

6708 N. San Gabriel Blvd. SAN GABRIEL, CALIF.

WHOLESALE ONLY



SEND FOR CATALOG

Write for List Today

H & S Personality Roses
Brad for American Gardens
HOWARD & SMITH, INC.
MONTERELLO, CALIF.

**America's Most Complete Collection
of IRISES**

Also DAY LILIES, POPPIES, LILIES and
OTHER NEW PERENNIALS.

Send for Trade List
WALTER MARX GARDENS, Box 38-AM, BORING, ORE.

CLASSIFIED ADS

Rate: 35 cents per line, each insertion.

Minimum order, \$3.50

Instructions for the next issue must be received by Friday, February 11.

AZALEAS

AZALEAS

Well-branched liners, for shipment beginning April 1. These are extra nice plants, having been sheared at least twice, with splendid root systems. Let us book your order now!

INDICA VARIETIES

ELEGANS INDICA ALBA
FIELDER'S WHITE JUDGE SOLOMON
FISHER'S PINK PRIDE OF MOBILE
GEORGE L. TABER

Per 100 Per 1000
6 to 8-in. liners \$10.00 \$90.00
KURUME AND HARRY JAPANESE

VARIETIES

CHRISTMAS CHEER MACRANTHA
CORAL BELLS ORANGE
HIXE PINK PEARL
HINO CRIMSON SALMON BEAUTY
HINODEGIRI SNOW
MACRANTHA DBL.

PERICAT VARIETIES
DAWN SWEETHEART
MME. PERICAT SUPREME
PINK PERICAT TWENTY GRAND

Per 100 Per 1000
4 to 6-in. liners \$10.00 \$90.00
COTTAGE HILL NURSERY
Rt. 4, Box 139 Mobile, Ala.

AZALEA HINODEGIRI.

Strong rooted cuttings, ready for immediate shipment, \$5.50 per 100, \$50.00 per 1000. F.O.B. Edgington, Pa.

FERRI'S NURSERY.

State Rd., Edgington, Pa.
Cornwell 0329.

AZALEAS.

Hino-Crimson, the choice of all who see its deep crimson flowers. Thousands of other beautiful Kurumes, Glenn Dales, etc. Dense, bushy, well-budded—for landscaping and forcing. Book your orders now as they sell out early. Send for new price list of azaleas and large assortment of choice ornamentals. THE TANKARD NURSERIES, Exmore, Virginia.

AZALEAS.

HINODEGIRI, CORAL BELLS, CHRISTMAS CHEER, PORMOSA, PRIDE OF MOBILE. Strong rooted cuttings, \$30.00 per 1000. Ready for immediate delivery. Rooted outdoors in mixture of peat and loam. Satisfaction guaranteed. Phone 5161.

FORD'S NURSERY, Box 509, Magnolia, Miss.

FIELD-GROWN AZALEAS.
ALL SIZES AND VARIETIES
SPECIAL PRICE ON LARGE LOTS
WRITE FOR LIST
LONGWOOD NURSERIES
P. O. BOX 407
MOBILE 3, ALABAMA

AZALEA FORMOSA, ALL SIZES.
Azaleas, many other varieties.
Evergreens and ornamentals.
Write for special quotations.
INWOOD LAKE NURSERIES
Thomasville, Ga.

BERRY PLANTS

NEW DURHAM OFF-SEASON RED RASPBERRY.

Ripens mid-August to mid-October. Cut all canes back to ground each fall. Cut comes on new growth each year. Eliminates winter killing.

Durham prices: Up to 3/16-in., \$50.00 per 1000; 3/16-in. to 1/4-in., \$75.00 per 1000; 1/4-in. up, \$85.00 per 1000.

Also Gatineau and Madawaska red raspberries, ripen two weeks ahead of Latham; Latham and Muskoka (midseason); Milton, a week later.

The new Blaze (late), Strafford (very late) strawberry varieties from U.V. of N. H. Exp. Sta. The new Pocahontas and three new Maine varieties, 20th Century, ever-bearing, and 30 others.

Write for free catalog and wholesale prices.
WALTER K. MORSS & SON,
Route 3, Bradford, Mass.

STRAWBERRY PLANTS.

Premier \$7.00 per 1000
Gem, everbearing 8.00 per 1000
Aroma 6.00 per 1000

SAM PACK NURSERY,
Route 5, Smithville, Tenn.

INTRODUCING THE NEW GREAT NORTHERN SEEDLESS BLUE GRAPE, nearly as large as Concord, but much sweeter, hardier, earlier and heavier bearing than Concord. Just as vigorous and healthy. Ripens with Moore's Early, 15 years under test. As hardy as Beta, 2-yr. No. 1, \$3.95 each; \$7.25 for 2; cuttings, 50c each; \$ for \$1.25, 5 per cent discount for cash or free baling. Plants or cuttings that die, replaced at 1/2 price.

SCHWAB FRUIT FARM & NURSERY
220 N. 5th St. Mankato, Minn.

SCHWAB GOOSEBERRIES, large as plums, new seedling (world's largest Gooseberry). Berries often 1 1/2-in. in diameter, highest quality, hardy, very productive, very sweet, 1-yr. heavy, \$6.50 per 10; 2-yr. light, \$7.50 per 10; bearing size, \$10.00 per 10. 5 per cent discount for cash or free baling. All plants that die replaced at half price.

SCHWAB FRUIT FARM & NURSERY
220 N. 5th St. Mankato, Minn.

EVERBEARING STRAWBERRY PLANTS.

True to name varieties.
Per 100 plants
Streamliner, \$16.00.
Gem and Superfection, \$15.00.
20th Century, \$30.00.
Write for prices on large amounts.
DAVIS PLANT FARM,
Hamilton, Mont.

NEW EVERBEARER STRAWBERRY.
If you want the best, try the "Brunes Jewel." Extra large plants and berries; excellent quality, red all through; almost immune to insect pests.
\$3.00 per 25, \$10.00 per 100.

BRUNES STRAWBERRY NURSERY.
Originator of new disease-resistant varieties,
Pequot Lakes, Minn.

Improved Senator Dunlap Strawberry plants, the heaviest bearing berries of them all for us; grown in Kansas' finest soil; irrigated; state double inspected. Always dug fresh and shipped at once. \$9.00 per 1000, in 10,000 lots; less amounts, \$10.00 per 1000. P.O.B. Concordia. Better order early; plants are scarce.
Riley's Nursery, Concordia, Kan.

Strawberry plants, double inspected, northern-grown: Dunlap, Blakemore, Premier, Giant Robinson, 1000, \$9.50; 5000, \$45.00. Giant Gem, Streamliner, Superfection, ever-bearing, 1000, \$19.00. These are young, healthy, moss-packed plants, guaranteed to reach you in good growing condition.
Iowa Nursery, Farmington, Ia.

BERRIES. Cumberland Raspberry and Thornless Boysenberry, 1-year tips, \$4.00 per 100, \$37.50 per 1000.

WAYNESBORO NURSERIES
Waynesboro, Va.

Small Ads Do Great Things in the American Nurseryman Classified Section.

BULBS AND TUBERS

TUBEROUS BEGONIAS
Giant double-flowering Camellia-type, 6 colors.

Per 100 Per 1000
1 1/4 to 1 1/2-in. \$ 5.50 \$ 45.00
1 1/2 to 2-in. 8.50 75.00
2-in. up 12.50 115.00
MAMMOTH, 3-in. UP 25.00 200.00

Double-flowering Fimbriata Carnation-type, 6 colors.
Per 100 Per 1000
1 1/4 to 1 1/2-in. \$ 7.00 \$ 60.00
1 1/2 to 2-in. 11.50 100.00
2-in. 15.00 140.00

Minimum order \$5.00.
LOUIS DANK

1170 Broadway, New York 1, N. Y.

PANCY-LEAVED CALADIUMS

The finest of commercial named varieties. Over 50 varieties. Fully upgraded.

Per 100 Per 1000
No. 3, 3/4 to 1 1/4-in. \$ 7.00 \$ 60.00
(mainly mixed) 12.00 110.00
No. 2, 1 to 1 1/4-in. 18.00 160.00
No. 1, 1 1/4 to 2 1/4-in. 25.00 230.00
Jumbo, 2 1/4 to 3 1/4-in. 37.00 350.00
Mammoth, 3 1/4-in. up 10.00 100.00
Orders totaling 1000 bulbs, 10 per cent discount.

Minimum order \$5.00.
Send for our color chart of 44 varieties.
LOUIS DANK

1170 Broadway, New York 1, N. Y.

CHOICE COMMERCIAL FLOWER BULBS

For growing or resale. Write for current list now or later you want.

REGAL BULB CO.,
Holland, Mich.

DAHLIAS.

LARGE-FLOWERING.

Each	Each
Avalon (yellow) \$0.12	
D-Day (rose-pink) ..... .20	
Florista's Beauty (red and white) ..... .20	
Gallant Fox (red) ..... .12	
Golden Eclipse (yellow) ..... .15	
Imp. Francis Larocco (yellow) ..... .14	
Jane Cowi (bronze-yellow) ..... .25	
Jean Kerr (white) ..... .12	
Jersey's Beauty (pink) ..... .15	
Lady in Red (red cactus) ..... .25	
Le Toreador (red) ..... .12	
Man (salmon-pink) ..... .25	
Michigan Orchid (purple) ..... .25	
Michigan White (white) ..... .20	
Mrs. James Albin (yellow) ..... .15	
Mrs. Le Boutillier (velvet carmine) ..... .14	
Mrs. I. de Ver Warner (lavender) ..... .20	
New York Market (white and lavender) ..... .15	
Ogden Reid (pink) ..... .20	
Orange Flame (reddish orange) ..... .22	
Queen City (scarlet-pink) ..... .20	
Supt. Amhryn (lavender-pink) ..... .17	
Victory (pink-gold) ..... .20	
Watchdog Giant (deep yellow) ..... .15	
White Jersey (white) ..... .25	
White King (white) ..... .15	

MINIATURE FLOWERING.

Ike (red) ..... .15
Lemon Drop (yellow) ..... .15
Lily Belle (pink) ..... .20
White Fawn (white) ..... .15

POMPON-FLOWERING.

Bronze Beauty (bronze) ..... .14
Cardinal (bright red) ..... .20
Golden Queen (yellow) ..... .12
Little Herman (red and white) ..... .12
Mary Munns (lavender) ..... .12
Morning Mist (white and lavender) ..... .12
Peggy Wood (white and red) ..... .12
Roithout (red) ..... .12
Yellow Gem (yellow) ..... .12

Minimum order \$5.00.
Not less than 5 of a variety.
LOUIS DANK.

1170 Broadway, New York 1, N. Y.

CANNAS.

The lovely "GRAND OPERA SERIES" These dwarf growing, pastel colors are bringing Cannas back into popularity.

AIDA, old rose and salmon
LA BOHEME, peach pink
LA TRAVIATA, old rose
MIGNON, orange pink
MME. BUTTERFLY, shell pink
RIGOLETTO, clear yellow.
3 eyes or more, F.O.B. San Marcos.
1 to 25, 30c each; 100 or more, 27 1/2c.
On small lots, add postage. Cheapest way.
SARVER NURSERY CO.,
San Marcos, Calif.

GLOXINIAS.

The best commercial varieties.
Per 100 Per 1000
1 1/4 to 1 1/2-in. \$ 7.50 \$ 65.00
1 1/2 to 2-in. 14.00 130.00
2-in. UP 22.00 195.00
Mammoth, 2 1/4-in. up 35.00 300.00
Minimum order \$5.00.
LOUIS DANK

1170 Broadway, New York 1, N. Y.

CAMELLIAS

CAMELLIA SASANQUA LINERS.

HEAVY, RED-GROWN
6 to 8 ins. 8 to 12 ins. 12 to 18 ins.
Annette \$0.15 \$0.17 \$0.25
Cinderella15 .17 .25
Cleopatra15 .17 .25
Mine-no-yuki15 .17 .25
Negishi-ko15 .17 .25
Rosa15 .17 .25
Setagakeka15 .17 .25
Texas Star15 .17 .25
Daydream25
Shishifukujin25 .30
Hinode-gumo25 .45 .65

SEMME'S NURSERIES

Semmes, Ala.

CAMELLIA SASANQUA.

Priced per 100 6 to 8 to 12 to 18 ins.
Ben-Kant-Subaki \$5.00 \$15.00
Cleopatra 15.00 17.50 25.00
Mine-no-yuki 15.00 17.50 25.00
Rosa 15.00 17.50 25.00

STEPHENS NURSERIES,

Semmes, Ala.

CAMELLIA JAPONICA.

Choice pot-grown liners in the better and newer varieties. Best for canning, shipping and transplanting.
Write for descriptive price list.

OVERLOOK NURSERIES, INC.,
Crichton Station, Mobile, Ala.

FIELD-GROWN CAMELIAS
ALL SIZES AND VARIETIES
SPECIAL PRICE ON LARGE LOTS
WRITE FOR LIST
LONGWOOD NURSERIES
P. O. BOX 467
MOBILE 3, ALABAMA

CHRYSANTEMUMS

HARDY CHRYSANTEMUMS.

Write for our 1955 HARDY CHRYSANTEMUM WHOLESALE LIST featuring the famous "Mum" Mums, the Universities of Nebraska, Minn., Chicago, Cushion types and many other money-making summer-flowering Mums. Many of these make excellent cut flowers that need no shading to produce flowers in late July and August. Top-quality, strong rooted cuttings and banded plants at competitive prices. SEND FOR LIST TODAY.

CORLISS BROS. INC. NURSERIES,
19 Reynard St., Gloucester, Mass.

**NEW UNIVERSITY OF NEBRASKA
HARDY MUMS.**

Kiowa, heavy clusters of bright reddish orange pompons. Excellent cut flower.

North Platte, massive 3 to 5-in. flowers of a bright orange shade.

Rooted cuttings, \$1.50 per 10, \$15.00 per 100.
FLEMING'S FLOWER FIELDS,
3100 Leighton Ave., Lincoln 3, Neb.

FLORETUM COLORFUL GARDEN MUMS.
Bred for early blooming, frost tolerance, winter hardiness. Ask for new '55 catalog.

PRAIRIE SOUTHWEST FLORETUM,
Fall River, Kan.

COTONEASTERS

COTONEASTER PRAECOX.

This is one of the hardest Cotoneasters which went through 20 degrees below zero without any harm. It has large berries like cranberries which color up in the middle of August and remain on until very late fall. It grows rather flat and makes an ideal plant to combine with foundation plantings, especially with ranch-type houses. We can offer the following for 1955:

	Per 100	Per 1000
Strong, 1-year seedlings, branched, 4 to 8 ins.	\$25.00	\$225.00
Transplants, 2-year, 8 to 12 ins.	50.00	
Cotoneaster Orientalis, strong 1-year seedlings	10.00	90.00
Cotoneaster divaricata, 1-year seedlings, 6 to 8 ins.	10.00	90.00

C. HOOGENDOORN,
Turner Rd., Newport, R. I.

DAISIES

Shasta Daisy Charming, everblooming, new, unusually large, perfect single, 4 1/2 to 5-in. flowers, which bloom freely from June through the summer to severe frost. 1-year plants, produced by us, \$25.00 per 100; 25 at 100 rate. Cash with order. We offer the best quality of hardy field-grown plants, including many new and unusual varieties. Write for trade list. Ridenour's Flower Farm, 1024 Chicago Rd., Allen, Mich.

DELPHINIUMS

LYONDEL GIANT HYBRID DELPHINIUM.

This strain withstands the combinations of droughty summers and severe winters. Exceptionally large flowers, wide range of beautiful colors, doubles, semi-doubles and singles. (Many customers report better than 90 per cent doubles.)

We should shout more about these LYONDEL HYBRIDS. If you haven't grown them, enjoy the best by test!

FIELD-GROWN PLANTS, mixed colors only.
\$3.75 per doz., \$22.50 per 100, \$200.00 per 1000.

CORLISS BROS. INC. NURSERIES,
19 Reynard St., Gloucester, Mass.

FINEST DELPHINIUM SEEDLINGS.

May sowing, 24-in. rows.
Belladonna, light blue.
Belladonna, dark blue.
\$6.00 per 100, \$57.00 per 1000.
Write for our list of Phlox.
R. M. KELLOGG COMPANY,
The best since 1869.
Three Rivers, Mich.

EVERGREENS

LINING-OUT STOCK.

	Each	Each Per 100	Each Per 1000
Ilex rotundifolia, TT, bushy, 8 to 9 ins.	\$0.40	\$40.00	\$400.00
Ilex rotundifolia, TT, bushy, 9 to 12 ins.	.50	50.00	500.00
Andromeda Catebaei (Leucothoe), TT, bushy, 8 to 10 ins.	.40	40.00	400.00
Andromeda Catebaei (Leucothoe), TT, bushy, 10 to 12 ins.	.50	50.00	500.00

Five or ten dollar sample sent upon request.
GERARD K. KLYN, INC.,
Mentor, O.

LINING-OUT STOCK.
PRICES SUBJECT TO CHANGE
WITHOUT NOTICE.

ALL POTTED LINERS ON THIS LIST ARE PRICED FOR SHIPMENT IN PAPER POTS OR CUPS. THOSE WHO PREFER THE ORDINARY METHOD OF PACKING, WHICH OMMITS THIS ADDED PROTECTION, MAY DEDUCT 1c PER PLANT.

The 1000 rate applies on all orders; therefore, please order in multiples of 25 or EACH

BIOTA AUREA NANA, BERCKMANS'	\$0.18
2 1/2-in. pots	.20
BIOTA AUREA PYRAMIDALIS	.20
COMPACTA	
2 1/2-in. pots	.18
2 1/2-in. pots	.20
BIOTA BONITA	
2 1/2-in. pots	.16
BIOTA BAKRI	
2 1/2-in. pots	.16
2 1/2-in. pots	.17
BIOTA EXCELSA	
2 1/2-in. pots	.18
2 1/2-in. pots	.20
BIOTA SIBYL	
2 1/2-in. pots	.18
2 1/2-in. pots	.20
CHAMAECYPARIS LAWSONIANA	
ALLUMI	
2 1/2-in. pots	.17
2 1/2-in. pots	.18
JUNIPERUS CHINENSIS PFITZERIANA	.17
2 1/2-in. pots	.18
JUNIPERUS CHINENSIS PFITZERIANA	
COMPACTA	
2 1/2-in. pots	.20
JUNIPERUS CHINENSIS PFITZERIANA	
NANA	
2 1/2-in. pots	.25
2 1/2-in. pots	.27
JUNIPERUS CHINENSIS VIRIDIFOLIA	
(Sometimes called Densa Glauca)	
2 1/2-in. pots	.26
JUNIPERUS COM. COLUMNARIS	
COMPACTA	
2 1/2-in. pots	.15
JUNIPERUS COMMUNIS KIYONOI	
2 1/2-in. pots	.10
2 1/2-in. pots	.12
JUNIPERUS COMMUNIS CRACOVIA	
(Polish Juniper)	
2 1/2-in. pots	.13
JUNIPERUS EXCELSA STRICTA	
2 1/2-in. pots	.17
2 1/2-in. pots	.18
JUNIPERUS GLAUCA HETZI	
2 1/2-in. pots	.16
JUNIPERUS HIBERNICA FASTIGIATA	
2 1/2-in. pots	.14
2 1/2-in. pots	.15
JUNIPERUS JAPONICA PROCUMBENS	
2 1/2-in. pots	.18
2 1/2-in. pots	.20
JUNIPERUS JAPONICA VIRGINALIS	
(Well shaped Juniper)	
2 1/2-in. pots	.20
JUNIPERUS SABINA TAMARISCIFOLIA	
2 1/2-in. pots	.20
JUNIPERUS VIRGINIANA KETELEERI	
2 1/2-in. pots	.25
THUJA OCCIDENTALIS PYRAMIDALIS	
2 1/2-in. pots	.16
ABELIA EDWARD GOUCHER	
2 1/2-in. pots	.15
BERBERIS JULIANAE	
2 1/2-in. pots	.25
BUXUS SEMPERVIRENS CRONI	
(Hardy Canadian Boxwood)	
2 1/2-in. pots	.20
2 1/2-in. pots	.22 1/2
BUXUS SUFFRUTICOSA	
3 1/2-in. TT, bare-root	.15
4 1/2-in. TT, bare-root	.17
EUONYMUS PATENS SIEBOLDI,	
large leaf	
2 1/2-in. pots	.13
2 1/2-in. pots	.15
EUONYMUS PATENS, small leaf	
2 1/2-in. pots	.15
EUONYMUS MICROPHYLLA PULCHELLA	
2 1/2-in. pots	.15
EUONYMUS RADICIS ERECTA	
2 1/2-in. pots	.15
2 1/2-in. pots	.17
ILEX CORNUTA	
2 1/2-in. pots	.20
3-in. pots	.25
ILEX CORNUTA BURFORDI	
ROOTED CUTTINGS	
1-year transplants from flats	.08
2 1/2-in. pots, extra heavy	.10
2 1/2-in. pots, extra heavy	.15
3-in. pots, extra heavy	.20
3 1/2-in. cans, extra heavy	.25
6 1/2-in. TTT, field-grown	.25
8 1/2-in. TTT, field-grown	.27 1/2
ILEX CRENATA CONVEXA BULLATA	
2 1/2-in. pots, extra heavy	.15
ILEX CRENATA HETZI	
2 1/2-in. pots	.20
ILEX CRENATA ROTUNDIFOLIA	
2 1/2-in. pots, extra heavy	.14
2 1/2-in. pots, extra heavy	.15
ILEX GLABRA, INKERRY	
2 1/2-in. pots	.18
2 1/2-in. pots	.20
ILEX HOWARDI (HUME)	
2 1/2-in. pots, extra heavy	.18
2 1/2-in. pots, extra heavy	.20

(Continued in next column.)

(Continued from previous column.)

LAUROCERASUS CAROLINIANA		
(Cherry-Laurel)		
3 1/2-in. seedlings	.04	
4 1/2-in. seedlings	.06	
6 1/2-in. seedlings	.08	
2 1/2-in. pots, extra heavy	.10	
2 1/2-in. pots, extra heavy	.12	
LIGUSTRUM IONANDRUM		
2 1/2-in. pots	.18	
2 1/2-in. pots	.20	
LIGUSTRUM JAPONICUM		
4 1/2-in. 6 1/2-in. seedlings	.02	
1 1/2-in. TTT, field-grown	.25	
2 1/2-in. pots	.08	
MAGNOLIA GRANDIFLORA		
2 1/2-in. seedlings	.04	
2 1/2-in. pots, extra heavy	.13	
2 1/2-in. pots, extra heavy	.14	
MAHONIA BEALEI		
2 1/2-in. pots	.15	
2 1/2-in. pots	.18	
NANDINA DOMESTICA		
2 1/2-in. pots, heavy	.10	
2 1/2-in. pots, extra heavy	.12	
PODOCARPUS MACROPHYLLA		
2 1/2-in. pots	.18	
2 1/2-in. pots	.20	
PHOTINIA SERRULATA		
2 1/2-in. pots	.18	
2 1/2-in. pots	.20	
TEUCRIUM CHAMAEDRYS		
(Dwarf perennial for borders)		
2-in. pots	.10	
2 1/2-in. pots	.12	
BERBERIS THUNBERGI		
ATROPURPUREUM		
(Red-leaved Barberry)		
2 1/2-in. pots	.15	
CORNUS FLORIDA		
2 1/2-in. pots, 2-yr. cal., 1/2-in. and up	.15	
LAGERSTROEMIA INDICA		
WM. TOOVEY		
2 1/2-in. pots	.18	
8 1/2-in. field-grown, heavy	.25	
LONICERA FLAMING BEAUTY		
2 1/2-in. pots	.15	
SPIRAEA ANTHONY WATERER		
2 1/2-in. pots	.12	
6 1/2-in. TT, field-grown	.15	
SPIRAEA REEVESIANA FLORA-PLENA		
(Double Reeves Spiraea)		
2 1/2-in. pots	.16	
12 1/2-in. TT, field-grown	.25	
T. G. OWEN & SON, INC.,		
H. M. OWEN, V. PRESIDENT & MGR.,		
Telephones 650-651, Columbia, Miss.		
EVERGREEN LINERS AND CUTTINGS		
POT-GROWN AND TRANSPLANTS		
Each—Per 100 Per 1000		
Arborvitae, American, dark green; 1-yr.	\$0.20	\$0.18
Arborvitae, Globe Woodward,		
4 to 5 ins.	.20	.18
Arborvitae, pyramidal, 1-yr.,		
5 to 6 ins.	.32	.20
Juniperus chinensis Pfitzeriana,		
1-yr. pots, 6 to 7 ins.	.24	.23
Juniperus glauca Hetzi, 1-yr.,		
5 to 6 ins.	.20	.18
Taxus cuspidata, 2-yr.		
6 to 9 ins.	.24	.22
Korean Boxwood, 1-yr., 3 ins.	.20	.18
HEAVY ROOTED CUTTINGS		
From flats, rooted outside in bath house.		
Delivery now.		
Boxwood, Korean, hardy	\$0.09	\$0.08
Boxwood, sempervirens,		
2 to 3 ins.	.07	.06
Euonymus alatus compactus,		
3 to 4 ins.	.09	.08
Euonymus erectus, 3 to 4 ins.	.07	.06
Euonymus patens, 3 to 4 ins.	.07	.06
Juniper, Swedish, 4 to 5 ins.	.10	.09
Juniperus chinensis Pfitzeriana,		
6 ins.	.13	.12
Juniperus glauca Hetzi,		
4 to 5 ins.	.10	.09
Taxus cuspidata, 4 to 5 ins.	.10	.09
Taxus intermedia, 4 to 5 ins.	.11	.10
Taxus media, spreading,		
3 to 4 ins.	.11	.10
Delivery June 30, 1955		
Arborvitae, pyramidal, 5 ins.	.11	.10
Arborvitae, Globe, 3 to 4 ins.	.10	.09
Arborvitae, American; dark green;		
5 ins.	.10	.09
Arborvitae elegantissima, 6 ins.	.10	.09
Taxus Hickoi, 5 to 6 ins.	.11	.10
Terms: 2% discount and free packing for cash with order. Our stock guaranteed 100% satisfactory or return within 5 days for full refund, plus full shipping charges paid.		
250 plants at 1000 rate.		
MIAMI NURSERY CO.,		
Tipp City, O.		
AZALEA HINODEGIRI.		
6 to 8 ins., 65c; 8 to 10 ins., 80c;		
10 to 12 ins., \$1.00, 12 to 15 ins., \$1.25.		
2-yr. Fedora, Othello, Good Times.		
Amoen, poukhanensis.		
Pieris japonica, 10 to 12 ins., 80c; 12 to 15 ins., \$1.25; 15 to 18 ins., \$1.50.		
Euonymus patens, 15 to 21 ins., 75c; 21 to 24 ins., \$1.00.		
Foraythia intermedia, 3 to 4 ft., 75c; 4 to 5 ft., \$1.00.		
POTTED 2 YEARS.		
Abelia, 60c		
Cotoneaster horizontalis, 75c.		
Pyracantha coccinea (orange berries), 75c and \$1.00.		
Pyracantha Rogersiana (red berries), 75c and \$1.00.		
All for delivery at nursery.		
WINDY ACRES NURSERY,		
Cross Keys Rd., Pittman, N. J.		

EVERGREENS—Continued

FIELD-GROWN LINE-OUT STOCK
TERMS: SHIPMENTS made on open account if satisfactory credit is established, otherwise cash should accompany order. No C.O.D. shipments made.

PACKING costs will be added (on a cost basis) to your invoice. We take every precaution to pack our stock so it will reach you in the best of condition.

GIVE US specific instructions and routing. If by truck or R.R. freight, be sure to give names of carriers and routing. This is important. Shipments are made same day they are packed.

ALL EVERGREENS are priced per each in quantities of 10, 100 and 1000. 25 of any grade or variety at 100 rate. 250 of any grade and variety at 1000 rate.

FIELD-GROWN EVERGREENS

Each, 10 100 1000

JUNIPER KOSTERI

Koster's Juniper

50 12 to 15 ins.\$0.80 \$0.75 \$0.70

300 8 to 12 ins.60 .55 .50

50 6 to 9 ins.40 .35 .30

JUNIPERUS HIBERNICA FASTIGIATA

Irish Juniper

900 9 to 12 ins. T.T.T.50 .45 .40

JUNIPERUS PFTZERIANA

Pfitzer Juniper

2000 12 to 15 ins. T.T.T.85 .80 .75

7000 9 to 12 ins. T.T.T.65 .60 .55

JUNIPERUS SABINA, Savin Juniper

200 15 to 18 ins. T.T.T. 1.20 1.10 1.00

2000 9 to 12 ins. T.T.T.65 .60 .55

1000 6 to 9 ins. T.T.T.45 .40 .35

JUNIPERUS SCOPULORUM, Silver Cedar

5000 9 to 12 ins. R.P.15 .12 .10

5000 6 to 9 ins. R.P.12 .10 .08

JUNIPERUS VIRGINIANA, Red Cedar

5000 18 to 24 ins. R.P.35 .30 .25

15000 12 to 18 ins. R.P.30 .25 .20

PICEA CANADENSIS ALBA, White Spruce

1200 12 to 15 ins. R.P.30 .18 .15

PICEA EXCELSA, Norway Spruce

1600 12 to 15 ins. R.P.20 .18 .15

10000 6 to 9 ins. R.P.09 .07 .05

2000 4 to 6 ins. R.P.07 .05 .03½

PICEA PUGENS GLAUCO

6000 6 to 9 ins. R.P.25 .20 .18

2000 4 to 6 ins. R.P.15 .12 .10

PINUS BANKSIANA, Jack Pine

2000 12 to 18 ins. R.P.20 .15 .12

2000 9 to 12 ins. R.P.10 .08 .06

PINUS EDULIS, Nut or Pinon Pine

1000 9 to 12 ins. R.P.15 .12 .10

1000 6 to 9 ins. R.P.08 .07 .06

PINUS NIGRA, Austrian Pine

20000 12 to 18 ins. R.P.30 .25 .20

30000 9 to 12 ins. R.P.12 .10 .08

20000 6 to 9 ins. R.P.09 .07 .05

PINUS PONDEROSA, Bull

Pine or Western Yellow

10000 12 to 18 ins. R.P.30 .25 .20

20000 9 to 12 ins. R.P.12 .10 .08

7000 6 to 9 ins. R.P.09 .07 .05

PINUS SYLVESTRIS, Scotch Pine

2500 12 to 18 ins. R.P.20 .17 .15

10000 9 to 12 ins. R.P.10 .08 .07

4000 6 to 9 ins. R.P.08 .06 .05

THUJA OCCIDENTALIS WOODWARDI

(Woodward's Globe)

300 12 to 15 ins. T.T.T.85 .80 .75

1500 9 to 12 ins. T.T.T.60 .45 .40

1500 6 to 9 ins. T.T.T.40 .35 .30

THUJA ORIENTALIS COMPACTA

(Chinese Arborvitae)

5000 9 to 12 ins. R.P.15 .12 .10

5000 6 to 9 ins. R.P.12 .09 .07

THUJA ORIENTALIS

(Chinese Arborvitae)

4000 12 to 15 ins. R.P.15 .12 .10

4000 9 to 12 ins. R.P.12 .09 .07

3000 6 to 9 ins. R.P.09 .06 .05

PLUMFIELD NURSERIES, INC.

Fremont, Neb.

DELIVERY, SPRING 1955

754 Buxus sempervirens, 2½-in. pots\$0.12

400 Euonymus vegetus, 2½-in. pots12

200 Euonymus radicans, 2½-in. pots12

200 Euonymus japonica, 2½-in. pots12

100 Forsythia Spring Glory, 2½-in. pots15

100 Forsythia Lynwood Gold, 2½-in. pots15

164 Ilex East Palatka, 2½-in. pots17

500 Ilex opaca (selected berried), 2½-in. pots25

208 Jasminum floridum, 2½-in. pots12

100 Jasminum nudiflorum, 2½-in. pots12

500 Laurocerasus schipkaensis, 2½-in. pots20

700 Ligustrum nepalense, 2½-in. pots15

500 Ilex Burfordi, 1-yr., 2½-in. pots15

252 Ilex Howardi, 2½-in. pots17

500 Andorra Juniper, 1-yr., 2½-in. pots17

500 Hetz Juniper, 1-yr., 2½-in. pots17

308 Pyracantha, upright; orange berry; 2½-in. pots12

140 Pyracantha, upright; orange berry; 1-yr., 2½-in. pots17

360 Pyracantha Lalandi, 1-yr., 2½-in. pots15

500 Viburnum Burkwoodi, 2½-in. pots15

2000 Taxus cuspidata, 2-yr., 3½x4 ins.33

1000 Taxus cuspidata, 2-yr., 2½-in. pots22

Small orders, include prepaid parcel post; otherwise we ship express collect.

THE LEICHHARDT HILLVIEW NURSERY

Phone 2-2441

Nashville Rd. Bowling Green, Ky.

JUNIPER CUTTINGS

Unrooted cuttings of Pfitzer Juniper, 6 to 8 ins. long, not trimmed, \$10.00 per 1000.

Cash. Express or motor freight.

KRONE'S FLOWER SHOP

4221 Grand Ave. Fort Smith, Ark.

GOLDEN GOOSE LINERS.
For Immediate Delivery or for Reservation. All quotations are for beautiful lining-out stock from 2½-in. pots, grown in open beds, under field conditions and ready for field planting.

HOLLY.

Per 100

ILEX CORNUTA FEMINA (Chinese

Holly), 4 to 6 ins.\$16.00

6 to 8 ins. 18.00

ILEX CORNUTA BURFORDI

4 to 6 ins. 12.50

6 to 8 ins. 14.00

10 to 12 ins. 16.00

ILEX CRENATA ROTUNDIFOLIA

(Japanese Holly), 6 to 8 ins. 12.50

10 to 12 ins. 15.00

ILEX CRENATA BULLATA

CONVEXA, 6 to 8 ins. 16.00

ILEX OPACA HOWARDI (Improved

American Holly), 6 to 8 ins. 17.50

ILEX CASSINE ANGUSTIFOLIA

6 to 8 ins. 16.00

Our hollies are grown from either cuttings or grafts, from well-berried specimens, insuring berries for you.

OTHER BROAD-LEAVED EVERGREENS.

EUONYMUS PATENS (Siebold),

8 to 10 ins. 10.00

EUONYMUS RADICANS, 8 to 10 ins. 10.00

LICHTSTRUM LUCIDUM COMPACTUM

(Griffing Waxleaf), 8 to 10 ins. 12.00

PHOTINIA SERRULATA, 6 to 8 ins. 16.00

TERMS: Packing without cost. 25 per cent with order, balance C.O.D. Minimum 50 of a kind, please.

EVERGREEN NURSERIES,

Poplar Pike,

Germanatown, Tenn.

ROOTED CUTTINGS.

SIZE Per 100 1000

Arborvitae, Green

Niagra \$0.08 \$0.07

Arborvitae, pyramidalis

6 to 10 ins.09 .08

Juniper, Andorra

4 to 8 ins.12 .11

Juniper, Pfitzer

4 to 8 ins.12 .11

Juniperus Hetzli

4 to 8 ins.12 .11

Taxus Browni

6 to 10 ins.10 .09

Taxus cuspidata

6 to 10 ins.09 .08

Taxus Hicksi

6 to 10 ins.09 .08

PLANT BANDS

Pfitzer Junipers22 .20

1-YEAR BEDS

Taxus cuspidata 6 to 8 ins.15 .14

Taxus Hicksi 6 to 8 ins.15 .14

Taxus capitata 6 to 10 ins.24 .22

Pyramidal

Arborvitae 6 to 10 ins.18 .16

2-YEAR BEDS

Arborvitae, Green

Niagra 8 to 12 ins.27 .25

Taxus cuspidata 6 to 8 ins.22 .20

6-YEAR

Taxus Hicksi (bare-root),

12 to 15 ins. \$1.00 each

GRAFTED SPRUCE

Koster Blue Spruce, 2½-in. pots, \$1.25 each

Moerhous Blue Spruce, 2½-in. pots, \$1.25 each

50 at 100 rate; 300 at 1000 rate. Packing at cost. Quantities of 5000 or more, write for special quotations.

DEAKES NURSERIES

G-4342 Branch Road

Flint 6, Mich.

EVERGREENS

Each

Pfitzer Juniper, T.T. field, sheared,

8 to 11-in. spread,\$0.40

11 to 14-in. spread,55

14 to 16-in. spread,65

6 to 10-in. bands,14½

8 to 10-in. bands,12½

Andorra Jun., bands, 6 to 10 ins. 12½

extra heavy 16½

Blue Hetz Jun., bands, 6 to 8 ins. 12½

8 to 10 ins. 16½

Greek Jun., bands, 6 to 8 ins. 14½

Savin Jun., bands, 6 to 10 ins. 12½

extra heavy 16½

Von Ehron Jun., bands, 8 to 10 ins. 12½

extra heavy 16½

heavy rooted, 8 to 10 ins. (topped)06

Spreading Jap. Yew, bands, 6 to 8 ins.20

Upright Jap. Yew, bands, 6 to 8 ins.20

Dwarf Jap. Yew (nana), bands, 4 to 6 ins.16

BROADLEAFS.

Euonymus coloratus, 6 to 10 ins.03½

Euonymus patens, small or large

leaved, 6 to 10 ins., bare-root,04

small leaved, bands10

All prices 300 or more total order. 50 of a variety. Less than 300, add 2c per plant.

Book your order for spring.

McINCH GREENHOUSES,

St. Joseph, Mo.

EVERGREEN TREE SEEDLINGS. 1000

Scotch Pine, 2-yr., 3 to 9 ins.\$25.00

Scotch Pine, 2-yr., 4 to 12 ins., spec. 35.00

Scotch Pine, 3-yr., 6 to 18 ins. 35.00

Austrian Pine, 2-yr., 3 to 6 ins. 25.00

Our 2-yr., 4 to 12-in. Scotch Pine is from seed gathered by ourselves from bluish-green trees of best characteristics. Other grades and kinds of seedlings available. Write for price list.

RAYMOND NELSON,

Grower of Evergreen Trees,

Airport Rd., Phone 2324, DuBois, Pa.

LINING-OUT STOCK

Per 100 Per 1000

Austrian Pine

2-0, 3 to 5 ins.\$3.00 \$18.00

Mugho Pine

2-0, 2 to 4 ins. 3.50 20.00

2-1, 4 to 6 ins. 5.00 35.00

Red Pine

2-0, 2 to 4 ins. 2.50 15.00

Black Hill Spruce

2-0, 2 to 4 ins. 3.50 20.00

4-YEAR EVERGREEN SEEDLINGS

	In. Per 100	1000
Balsam Fir.....4 to 7	\$ 8.75	\$43.75
Black Hills Spruce.....6 to 14	15.00	75.00
Mugho Pine (Cert. Tyr.).....8 to 12	12.00	60.75
3-YEAR SEEDLINGS		
Douglas Fir (Blue).....6 to 12	10.75	53.75
Norway Spruce (fast-growing strain).....6 to 12	9.00	45.00
2-YEAR SEEDLINGS		
Austrian Pine (Cert. Alps).....4 to 9	7.00	35.75
Jap. Black Pine.....7 to 14	7.50	37.50
Scotch Pine (Cert. Austrian seed).....6 to 12	7.00	35.75
Scotch Pine (Western Europe).....4 to 9	7.00	35.75
Colorado Blue Spruce (seed from Blue trees).....3 to 7	7.50	37.50
Concolor Fir (Colorado).....3 to 7	12.75	.....

PARCEL POST prepaid up to 4th zone.
NEUNER'S EVERGREEN NURSERY
368 Eicher Rd., Pittsburgh 2, Pa.

20,000 TAXUS LINERS FROM FIELD BEDS.

	Each	Per 1000
7000 Taxus Hicksi, 4 yrs., T.
10 to 15 ins.....
3500 Taxus cuspidata, 5 yrs., T.
12 to 18 ins.....
3000 Taxus capitata (cuttings), 5 yrs., T. 12 to 18 ins.....
2500 Taxus capitata (cuttings), 3 yrs., T. 8 to 12 ins.....
3000 Taxus cuspidata, 3 yrs., T. 8 to 12 ins.....
2500 Taxus Hicksi, 5 yrs., T. 8 to 10 ins.....

Terms: 300 at 1000 rate. Add 2c per plant on orders for less than 300 of each variety. Cash with order or 25 per cent down, balance C.O.D. Packing free.

RANDOLPH NURSERY

89 Babylon Turnpike, Merrick, L. I., N. Y.
Freeport 9-5235.

EVERGREEN LINERS.

	Each
Cedrus Deodara, 2-year liners, 12 to 15 ins.....
Cedrus Deodara, 2-year liners, 15 to 18 ins.....
Prompt shipment of these mail order grades, branched.
Aucuba japonica, variegated; 2-year, 4-in. pots.....
Aucuba japonica, green (female), 2-year, 4-in. pots.....
Abelia grandiflora, 12 to 18 ins.....
Abelia grandiflora, 10 to 12 ins.....
Mahonia Bealei, seedlings, 1-year grade, \$35.00 per 1000.

JORDAN NURSERIES

P. O. Box 130, Milledgeville, Ga.

GOOD, UNROOTED CUTTINGS.

	5 long, \$12.00 per 1000.
ARBORVITAE, Woodward's Globe
Berkman's Golden
Golden beverleyensis
Baker's Pyramidal
CYPRESS ALUMI, BLUE
JUNIPERS, PFITZER'S
Savin
Tamariscifolia
Spiny Greek
Colorado Silver
White's Silver King Juniper (plant patent No. 1186). (Spreading Silver Juniper attains a height of 10 in.) Plants from 3-in. pots. Each, per 100, 95c; each, per 1000, \$5c.

WHITE'S NURSERY

716 S. 9th Ave., Walla Walla, Wash.

QUALITY SEEDLINGS, TRANSPLANTS.

	Per 100	Per 1000
2-YEAR SEEDLINGS
Scotch Pine, 4 to 8 ins.....
Colorado Blue Spruce, 2 to 5 ins.....
Concolor Fir, 4 to 8 ins.....
3-YEAR SEEDLINGS		
Austrian Pine, 8 to 14 ins.....
Norway Spruce, 4 to 8 ins.....
Colorado Blue Spruce, 3 to 5 ins.....
American Arborvitae, 4 to 8 ins.....
4-YEAR TRANSPLANTS		
Norway Spruce, 6 to 14 ins.....
Cash with order. Packing free.

ARTHUR CASH NURSERY

Lake Shore Rd., Angola, N. Y.

STRONG LINERS

Globe Arborvitae, 2-yr., TT.....	.....
Pfitzer Juniper, 12 to 18 ins., 3-yr., TT.....	.....
Pyramidal Arborvitae, 8 to 12 ins., 2-yr., TT.....	.....
Pieris japonica, 8 to 10 ins., 3-yr., TT.....	.....
Leucothoe Catesbaei, 6 to 8 ins., 3-yr., TT.....	.....
Pyracantha Lalandi, 12 to 15 ins., 3-yr., TT.....	.....
Taxus Spreader, 8 to 12 ins., 3-yr., TT.....	.....
Taxus Hicksi, 8 to 12 ins., 3-yr., TT.....	.....
Azalea Mollis, 8 to 12 ins., 3-yr., TT.....	.....
Over 200.....	.....

DUGAN NURSERIES

Center St., Perry, O.

DWARF BOXWOOD

Border your flower beds and walks with our Old English Buxus suffruticosa, several years old. Field-grown, compact, good color, 4 to 5 ins., \$25.00 per 100; 8 to 9 ins., \$50.00 per 100.

PINKSTON NURSERIES

Parrott, Ga.

CANADA HEMLOCK.

Collected seedlings and transplants.

	Per 100	Per 1000
6 to 9-in. seedlings.....
9 to 12-in. seedlings.....
12 to 18-in. seedlings.....
4 to 8-in. transplants, 2-yr.....
8 to 12-in. transplants, 2-yr.....

These are first-quality, bushy Hemlocks, carefully dug and packed in sphagnum moss in ventilated boxes.

Send for complete list of lining-out stock.

ISAAC LANGLEY WILLIAMS,

Box AN, Exeter, N. H.

EVERGREEN SEEDLINGS.

	100	1000
Colorado Blue Spruce.....
3-yr., 3 to 6 ins.....
2-yr., 1 1/2 to 3 ins.....
Scotch Pine, 3-yr., 6 to 12 ins.....
2-yr., 3 to 6 ins.....
Austrian Pine, 3-yr., 6 to 12 ins.....
2-yr., 4 to 6 ins.....
Blue Spruce, transplants, 2-1 and 2-2.....
Mugho Pine, transplants, 3-2.....

Write for list.

HOUTZDALE TREE NURSERY

936 Elizabeth St., Pittsburgh 21, Pa.

Adolph Kamrath, owner.

HEAVY B&B SPECIMENS.

	Each
Canadian Hemlock, 2 to 3 ft.....
Pfitzer Juniper, 4 ft., heavy.....
Hetzl Juniper, 3 to 4 ft., heavy.....
Von Ehron Juniper, 3 to 4 ft., heavy.....
Thujka Juniper, 3 to 4 ft., heavy.....
Thujla occ. pyramid., 5 to 6 ft., heavy.....
Thujla occ. pyramid., 4 to 5 ft., heavy.....

F.O.B. nursery, 10 days' notice must be given before stock to be picked up. Terms: Cash.

TARHEELIAN NURSERIES, Lenoir, N. C.

RED SPRUCE, BALSAM FIR.

5 to 7-yr. Larger, older, better.

Round needle type, carefully puddled, packed and shipped the same day they are dug. These seedlings are tall enough to survive in bushy grass, trash and weeds. Our customers write us how pleased they are with them. You will be too.

4 to 8 ins.....\$30.00 per 1000

8 to 12 ins.....35.00 per 1000

12 to 20 ins.....40.00 per 1000

ST. REGIS TREE NURSERY

St. Regis Falls, N. Y.

HEAVY, POTTED EVERGREEN LINERS

Excellent stock under lath.

Per 100

Buxus sempervirens, 2 1/2-in. pots, 3-yr.....\$22.50

Buxus koreana, 2-in. pots, 3-yr.....22.50

Juniperus chinensis, 2-in. pots, 2-yr.....15.00

Taxus cuspidata, 2-in. pots, 2-yr.....20.00

Taxus cuspidata, 2 1/2-in. pots, 2-yr.....22.50

Taxus Hicksi, 2 1/2-in. pots, 2-yr.....22.50

3-yr., T. 10 to 12 ins.....37.50

Spring delivery. Cash packing free.

FLORAL GARDENS, EATON, O.

JUNIPER GRAFTS

Canarti, glauca, Burki, Keteleeri, Dundee, chinensis mascula. All on Va. understock. Priced, 40c each; no discount. Terms: One-fourth cash with order and balance before shipping date, plus packing at cost. All cash with order earns 5% discount. Order at once. Two-thirds sold out now. When better grafts are made, Crume will make them.

T. C. CRUME NURSERY AND LANDSCAPING CO.

Highway 42, Florence, Ky.

EVERGREENS

Per 100 Per 1000

Scotch Pine, 2-yr., 2 to 4 ins.....\$2.00 \$10.00

2-yr., 3 to 6 ins.....3.00 6.00

2-yr., 6 to 8 ins.....3.50 20.00

Scotch Pine (Riga).....

2-yr., 4 to 8 ins.....3.50 20.00

3-yr., 5 to 12 ins.....4.00 25.00

Colorado Blue Spruce.....

2-yr., 1 to 4 ins.....3.50 20.00

CHAPMAN'S NURSERY

653 Church St., Indiana, Pa.

JAPANESE BLACK PINE

Pinus thunbergi compacta Hrenl.

Our own dense strain of this most popular evergreen for seashore and other adverse conditions that lack the ranginess of the ordinary strain. Heavy, rounded, 4 to 5 year liners, bare-root, April delivery; rate per 1000: 10 to 12 ins., 35c; 12 to 15 ins., 60c. Also larger landscape sizes.

JOS. A. HREN NURSERIES

Rt. 27, East Hampton, L. I., N. Y.

YEWS, 2-YEAR, IN FIELD BEDS.

Ready to line out in the field.

Per 100

Taxus Browni, 6 to 10 ins., T.....\$35.00

Taxus cuspidata, 6 to 10 ins., T.....30.00

Taxus cuspidata capitata.....

8 to 10 ins., T.....35.00

Taxus Hicksi, 8 to 10 ins., T.....30.00

Taxus cuspidata, 8 to 10 ins., T.....30.00

FRED P. STROHL

1404 N. Anthony Blvd., Fort Wayne, Ind.

LARGE SIZE, 2-YEAR SEEDLINGS WITH GOOD ROOTS.

White Spruce, 5 to 8 ins., \$20.00 per 1000.

Douglas Spruce, blue strain; 5 to 8 ins., \$22.00 per 1000.

Norway Spruce, fast growing strain; 5 to 8 ins., \$20.00 per 1000.

Samples \$5.00. Cash with order, please.

CARROLL HILLS NURSERY

Ipswich, Mass.

AMERICAN BOXWOODS.

3 years in bed,

\$15.00 per 100,

\$125.00 per 1000.

BROWN'S NURSERY.

Harmony, N. C.

TAXUS CAPITATA SEEDLINGS.

2-year, 4 to 7 ins.,

\$15.00 per 100, \$100.00 per 1000.

GONZALEZ NURSERIES,

247 N. 17th St., Camp Hill, Pa.

HEAVY FIELD-GROWN LINERS

Juniperus Pfitzeriana, Each

9 to 12 ins., XX.....\$0.30

Juniperus Pfitzeriana,

12 to 15 ins., XX......50

These are heavy-rooted and far above average. Spring shipment.

Cash with order.

DAMASCUS NURSERIES,

Box 216, Damascus, O.

TAXUS, 2-YEAR

Per 100 Per 1000

CUSPIDATA.....\$35.00 \$30.00

CAPITATA.....35.00 30.00

Moony.....35.00 30.00

Hicksi.....35.00 30.00

Densiformis.....35.00 30.00

These cuttings are extra heavy.

LARRY'S NURSERIES, INC.

960 Reservoir Ave., Cranston 10, R. I.

JUNIOR SPECIMEN TAXUS

Field-grown, T.T. Sheared.

TAXUS HICKSI, 24 to 28 ins.....\$2.25

TAXUS HATFIELDI, 18 to 24 ins.....2.25

TAXUS HICKSI, 18 to 24 ins.....1.85

TAXUS HICKSI, 18 to 24 ins.....1.85

TAXUS HICKSI, 18 to 24 ins.....1.65

TERMS: CASH with order. Shipped bare-root, free packing. Limited quantity.

TARHEELIAN NURSERIES, Lenoir, N. C.

JUNIPERS.

Each, per 1000

2500 Hetz, transp., 12 to 20 ins.....\$0.23

2500 Hetz, transp., 8 to 10 ins......12

600 Hetz, sheared, 18 to 30 ins., B&B.....1.65

250 Andorra, 18 to 30 ins., B&B.....1.65

1000 Retinispora plumosa, transp., 10 to 15 ins......23

Prices here at nursery in beetle zone.

HOHN NURSERY, R. D. 2, Jeannette, Pa.

2 miles N. of Greensburg, Pa., off Route 66.

WELL ROOTED CUTTINGS

Per 1000

Hlex rotundifolia, 4 ins.....\$50.00

JOHNSON'S NURSERY

Baxter, Tenn.

BIOTA ORIENTALIS.

Per 1000

2-yr., 10 to 14 ins.....\$30.00

1-yr., 3 to 6 ins.....15.00

JUNIPERUS VIRGINIANA.

2-yr., 6 to 9 ins.....60.00

These are carefully packed.

SOUTHERN NURSERY

Rt. 7, Box 245A, Oklahoma City 9, Okla.

EVERGREEN LINERS.

100 1000

Bar Harbor Juniper, 8 to 10, T.....\$125.00

Andorra Juniper, 6 to 10, T.....15.00

Hlex rotundifolia, 9 to 12, T.....25.00

Norway Spruce, 9 to 12, T.....17.50

Heavy rooted, field transplants.

Cash with order. Free packing.

WHERRY'S NURSERIES, St. Marys, W. Va.

AMERICAN BOXWOOD

Per 100

Buxus sempervirens, field-grown.....\$ 50.00

12 to 15 ins.....75.00

15 to 18 ins.....100.00

PINKSTON NURSERIES

Parrott, Ga.

HEAVY, 2-YEAR SEEDLINGS.

100

Elaeagnus Fruticand, 10 to 12 ins.....\$10.00

EVERGREENS—Continued

JAPANESE BLACK PINE
4 to 7 ft., about 600, also Hybrid Rhododendrons, 18 to 30 ins. Also Hybrid Rhododendron grafted liners for spring, 1955. Write for list of varieties.
PARMENTIER'S ROSES
Grady St., Bayport, L. I., N. Y.
Phone: 8-0811 or 8-2331

FRUIT AND NUT TREES**DWARF APPLE STOCKS**

We are making 20,000 piece-root grafts of
Mailing I, II and VII,
for early spring, 1955, delivery.

These can be budded in August, 1955.

Write for particulars and prices.

LORNE J. DOUD
Route 1
Wabash, Ind.

FLOWERING CRAB APPLE GRAFTS.
ATROANGUINEA HOPA
ALMEY NORMANDI
DOLGO RED SILVER
ELEYI SCHEIDECKERI

\$10.00 per 100, \$85.00 per 1000.

APPLE GRAFTS.
GRIMES GOLDEN STAYMANS
JONATHAN WINNAP
MINTOSH WINESAP
ROME BEAUTY YEL. DELICIOUS
RED DELICIOUS YEL. TRANS.
RED JUNE PARENT

\$5.50 per 100, \$45.00 per 1000.

Prepaid for cash with order.

PRITCHARD'S NURSERIES, Ottawa, Kan.

CHINESE CHESTNUT TREES
Row run, culls out, 3-yr.-old stock, 2 ft. and up. Mostly 2 to 3 ft., some 4 ft. All branched and well-rooted. Tied in 20's, in lots of 100, \$32.50 per lot. Very profitable lining-out stock or for mail-order sales. F.O.B. Cowen, packing at cost. All other popular sizes in seedlings, transplants, and 1-yr.-old liners in quantities. Write for prices.

GOLD CHESTNUT NURSERY
Cowen, W. Va.

CHINESE CHESTNUT
USDA No. P. I. 58602.
Has proven, so far, as best
for general planting.
2 to 3 ft., 2-yr., per 5, \$7.50; 10, \$14.00.
3 to 4 ft., 2-yr., per 5, \$8.75; 10, \$16.00.
WHITFORD NURSERY, FARINA, ILL.

GROUND COVERS

VINCA MINOR, HARDY MYRTLE, PERIWINKLE.
Best all-purpose, quality ground covers, made up 15 to 20-cane clumps. Plant all year round, \$50.00 per 1000.

Pachysandras, 1-year, rooted cuttings, \$55.00 per 1000.
Hall's Lonicera Honeysuckle, \$45.00 per 1000, branched.

H. C. WAUGH,
745 Boulevard Dr., Belpre, O.

PACHYSANDRA TERMINALIS — strong-rooted cuttings, \$3.75 per 100, \$3.50 per 1000; \$32.50 for any order of 5000 or more.

Prompt shipment. Beetle zone only.

DUNWOODIE NURSERIES,
6 Smart Ave., Yonkers, N. Y.
Phone: Yonkers 5-1473.

PACHYSANDRA TERMINALIS.
Strong 1-yr. field-grown, \$65.00 per 1000.
HILLCREST GREENHOUSES, Franklin, Pa.

HARDY PLANTS

MESEMBRYANTHEMUMS.
Now you too can have these wonderful mass-blooming new originations to propagate from or sell.

Formerly, exclusively sold in gallon cans here in Southern Calif. We are now expanding our facilities to ship to all parts of the United States.

Semi-hardy to 25 degrees above zero outside, but can be grown under glass for spring nursery sales.

Write for list and prices.
ROY ZILK'S NURSERY,
602 Lomita St.,
El Segundo, Calif.

NEW HARDY PERENNIALS.
Our new list, a copy of which is awaiting your request, includes an outstanding assortment of new introductions.
FLEMING'S FLOWER FIELDS,
3100 Leighton Ave., Lincoln, Neb.

LIRIOPE, THE IDEAL EVERGREEN, everlasting border plant, sun or shade; hardy to New York. Our stock is excellent. Can supply most any quantity. Send for catalog.

Majestic, heavy divisions, \$2.00 \$12.00 \$100.00
2-yr. clumps 7.00 50.00
Border Gem, heavy divs., 1.50 8.00 60.00
2-yr. clumps 5.00 40.00
Big Blue, heavy divs., 2.00 10.00 80.00
2-yr. clumps 7.00 50.00
RIEDEL PLANT CO., EXPERIMENT, GA.

GERBERAS, PRIZE-WINNING STOCK.
Per 100 Per 1000
Small (Duplex) \$11.00 \$100.00
Large (Duplex) 15.00 135.00
Jumbo (Duplex) 25.00 225.00
DOUBLES, EXTRA CHOICE, 10 SEPARATE COLORS; sturdy divisions, \$37.50 per 100, \$350.00 per 1000.

250 takes 1000 price, F.O.B. San Fernando.

Other fine perennials. Write for catalog.
FEADER WHOLESALE NURSERIES,
P. O. Box 428, San Fernando, Calif.

HIBISCUS, HENDERSON'S GIANT HYBRIDS, mixed. Hardy from Florida to Canada. These magnificent hybrids produce 8 to 12-in. blossoms, red, white and pink; easily grown, long blooming season. An ideal mail order item. Liners, \$2.00 per doz., \$10.00 per 100, \$60.00 per 1000. Heavy stock, \$4.00 per doz., \$20.00 per 100, \$150.00 per 1000. All blooming size. Send for wholesale list.
RIEDEL PLANT CO., EXPERIMENT, GA.

MAMMOTH SAGE.
Famous Holt strain. Dried leaves used for seasoning sausage, dressing, etc. Beautiful blue-flowering hardy plants, grow for years without replanting.

1-year, field-grown Per 25 Per 100
2-year, field-grown \$2.00 \$6.00
2.75 9.00
BOHLENDER NURSERIES CO.,
Tipp City, O.

HELLEBORUS NIGER
(Christmas Rose)
Our own grown.
3-yr. transplants
\$50.00 per 100
\$450.00 per 1000
C. HOOGEENDOORN

Turner Rd. Newport, R. I.

BLEEDING HEARTS
The old-fashioned favorite for pot or garden. Strong undivided clumps.

3 to 5 eyes Per 10 Per 100
5 eyes and over \$5.00 \$30.00

6.00 40.00
SOMERSET, SEEDS, PLANTS

P. O. Box 608 New Brunswick, N. J.

MIMOSA, CLEAN, VIGOROUS STOCK

LINERS. Per 100 Per 1000

6 to 12 ins. \$2.50 \$20.00

12 to 18 ins. 3.00 25.00

18 to 24 ins. 3.50 30.00

Send for wholesale list.
RIEDEL PLANT CO., EXPERIMENT, GA.

Hardy perennial Verbenas, Dazzling Red and Apple Blossom, field-grown plants, not rooted cuttings, \$9.50 per 100, \$75.00 per 1000. Shipment when wanted.

Roy Harrell Nursery, Fayetteville, Ga.

PERENNIALS.
New and standard kinds.
New wholesale list now ready.
CARROLL GARDENS,
Box 15, Westminister, Md.

America's Best Source
for Hardy Plants is
THE WAYSIDE GARDENS
Mentor, Ohio
Write for Trade List.

FLORETUM HARDY PLANTS.
Colorful Mums, perennials. Ask for catalog.
PRAIRIE SOUTHWEST FLORETUM,
Fall River, Kan.

Pansies, perennials and rock plants in wide variety. Send for catalog.
PITZONKA'S PANSY FARM & NURSERY,
Bristol, Pa.

WELLER'S BETTER PERENNIALS.
WELLER NURSERIES CO., Holland, Mich.
Write for trade list.

**YOU CAN SELL YOUR STOCK
QUICKLY AND WITH
LESS EXPENSE
BY ADVERTISING IN
THE CLASSIFIED COLUMNS OF
THE AMERICAN NURSERYMAN**

HARDWOOD CUTTINGS**HARDWOOD CUTTINGS.**

We specialize in furnishing hardwood cuttings to the trade. Because it takes time to process them, we especially urge early reservation of needs.

We cut a little over 7 ins. Tie in 100. Please order in multiples of 100. Where case accompanies order, packing is free. We guarantee delivery in good condition.

Per 1000
Aronia melanocarpa \$ 5.00
Cornus paniculata 5.00
Sibirica 5.00
Amomum 5.00
Forsythia intermedia 4.00
Spectabilis 4.00
Primulina 4.00
Ovata 4.00
Hydrangea P.G. 5.00
Hydrangea A.G. 5.00
Privet, Amar (North) 4.00
Regel (true) 4.00
Honeysuckle, Morrowi 4.00
Bella albidia 4.00
Bella rosea 4.00
Tatarica rosea 5.00
Korolkowi 5.00
Zabeli 5.00
Diervilla trifida 5.00
Philadelphus grandiflorus 4.00
Bouquet Blanc 4.00
Amalthee 5.00
Coronarius 4.00
Physocarpus, opulifolius aureus 4.00
Opulifolius nanus 5.00
Sorbaria sorbifolia 4.00
Spiraea Billardi rosea 4.00
Froebel 4.00
Thunbergi 4.00
Vanhouttei 4.00
Trichocarpa 4.00
Snowberry, white 4.00
Viburnum dentatum 5.00
Poplar, Lombardy 4.00
Willow, Niobe weeping 4.00
Pussy 4.00
Dwarf, Arctic 5.00
Arborvitae Wareana (Siberian) 15.00
Globe 15.00
Retinospora plumosa 15.00
Juniper, Pfitzer 15.00
Andorra 15.00
Savin 15.00
Taxus, cuspidata 15.00
Canadensis 15.00
SCOTCH GROVE NURSERY,
Scotch Grove, Ia.

HOLLY**HOLLY.**

Strong, healthy stock.

8 to 12 to
Priced per 100 8 ins. 12 ins. 18 ins.
Ilex Burfordi \$15.00 \$17.50
Ilex o. East Palatka 15.00 17.50 \$20.00
Ilex o. Howardi 15.00 20.00
Ilex o. Croonenburg 15.00
Ilex rotundifolia 10.00 12.50 17.50
Field-grown, bushy 30.00 40.00

STEPHENS NURSERIES,

Semmes, Ala.

ILEX CRENATA ROTUNDIFOLIA.

Transplanted, outdoor bed-grown.
4 to 6 ins. \$8.00 per 100
6 to 8 ins. 10.00 per 100
8 to 12 ins. 12.00 per 100
5 per cent discount on orders of \$100.00 or more.

B. F. PONDER,
Lanett, Ala.

HOLLY.

Order now for spring delivery.
Cutting-grown female plants out of 3-in. pots.
English Holly, green \$40.00 per 100
Rooted cuttings, green 17.50 per 100
100 minimum quantity. Cash with order.

DESCANSO DISTRIBUTORS, INC.,

Wholesale Growers, Chino, Calif.

ILEX BURFORDI (gal. cans), 60c.

ILEX BULLATA (convexa) and **ILEX**

ROTUNDIFOLIA, heavy, 15 to 18 ins., \$1.75;

18 to 24 ins., \$2.25. Quantity at discount.

FRIERSON'S FLOWERS, Denmark, S. C.

OREGON ENGLISH HOLLIES

Cut holly. General nursery stock.

May we quote you?

ALFRED TEUFEL

11414 N. W. Cornell Rd., Portland, Ore.

IVIES

HARDY ENGLISH IVY

(**HEDERA HELIX.**)

Strong 2½-in. pots, pinched back,

\$13.50 per 100, \$130.00 per 1000.

Spring shipment; beetle zone only.

Packing free for cash.

LEHIGH VALLEY NURSERIES, INC.,

1745 Linden St., Bethlehem, Pa.

BALTIC IVY.

Strong, clean, well-rooted stock.

Per 100 Per 1000

Rooted cuttings \$ 6.00 \$55.00

2-in. pots 10.00 95.00

Can ship now or later, 25 per cent down to reserve.

STRATFORD GARDENS,

Russell Brees, Delaware, O.

HARDY ENGLISH IVIES.

Hedera gracilis, small-leaved English Ivy. Excellent close netting ground cover. Rooted cuttings, \$5.00 per 100, \$45.00 per 1000.
 HEDERA BALATICA, best evergreen Ivy. Rooted cuttings, \$5.00 per 100, \$45.00 per 1000.

Spring shipment. Free packing for cash.

BABCOCK GARDENS.

Route 3, Jamestown, N. Y.

LINING-OUT STOCK

BEDDED STOCK

1 yr. in the open.

	Per 100	Per 1000
Ilex convexa	\$20.00	\$180.00
Ilex rotundifolia	20.00	180.00
Coccoloba Hookeri	25.00	
Taxus Andersoni	20.00	175.00
Taxus brevifolia	20.00	
Taxus Browni	17.50	150.00
Taxus canadensis stricta	17.50	
Taxus capitata, cutting		
grade	25.00	
Taxus cuspidata	17.50	150.00
Taxus Hatfieldi	17.50	150.00
Taxus Hicksi	17.50	150.00
Taxus intermedia	17.50	150.00

SEEDLINGS AND TRANSPLANTS

Abies Douglasii, 2-yr., S.	4.00	35.00
Abies Nordmanniana, 1-yr., S.	10.00	90.00
Acer palmatum, 1-yr., S.	5.00	50.00
Acer palmatum, 2-yr., S.	7.50	65.00
Acer palmatum atropurpureum, 1-yr., S.	22.50	200.00
Ampelopsis Veitchii, 2-yr., T.	15.00	125.00
Chamaecyparis obtusa, 2-yr., S.	3.00	25.00
Cornus florida, 1-yr., S.	6.00	50.00
Cornus florida, 2-yr., S.	7.50	65.00
Cornus xanthocarpa, 2-yr., S.	20.00	150.00
Cupressus Lawsoniana, 2-yr., S.	5.00	40.00
Euonymus alatus, 1-yr., S.	3.50	30.00
Euonymus alatus compactus, 1-yr., S.	5.00	40.00
Ilex crenata, 2-yr., S.	10.00	90.00
Ilex canadensis, 2-yr., S.	3.50	30.00
Picea Engelmannii, 3-yr., S.	5.00	40.00
Picea excelsa, 2-yr., S.	2.50	20.00
Picea pungens, 2-yr., S.	3.50	30.00
Pinus austriaca, 2-yr., S.	7.00	60.00
Pinus densata, 2-yr., S.	7.00	60.00
Pinus Mugo, Tyr., 3-yr., S.	6.50	60.00
Pinus resinosa, 3-yr., S.	7.00	60.00
Pinus Strobus, 3-yr., S.	4.50	40.00
Pinus sylvestris, 2-yr., S.	6.00	50.00
Pinus Thunbergii, 2-yr., S.	5.00	40.00
Syringa vulgaris, 2-yr., S.	4.00	30.00
Taxus capitata, 1-yr., S.	5.00	40.00
Taxus capitata, T., 1-yr., S.	6.00	50.00
Taxus capitata, T., 2-yr., S.	16.00	150.00
Taxus canadensis, 2-yr., T.	8.00	80.00
Viburnum theifolium, 1-yr., S.	10.00	90.00

HEAVY, FIELD-GROWN STOCK

Bare-root and ready for Cloveraset pots and cash-and-carry trade.

	Per 100
Acer palmatum atropurpureum, 15 to 18 ins.	\$400.00
Cornus florida, 2 to 3 ft., bushy	80.00
Cornus florida rubra, 18 to 24 ins.	125.00
Cornus Kousa, 2 to 4 ft.	100.00

The above stock has been several times transplanted. Special price on large quantities. Full list on demand.

VERKADE'S NURSERIES, Wayne, N. J.

JUNIPER LINERS.

For spring planting, field-grown.

	Per 100
Juniperus communis Ashfordi (Ashford)	
1-yr., 8 to 12 ins.	\$10.00
2-yr., 12 to 15 ins.	15.00
Juniperus communis cracovia (Polish)	
2-yr., 8 to 12 ins.	12.50
Juniperus communis depressa	
1-yr., 8 to 12 ins.	12.50
Juniperus communis fastigiata (Improved Irish)	
1-yr., 6 to 8 ins.	10.00
2-yr., 8 to 12 ins.	12.50
2-yr., 12 to 15 ins.	17.50
Juniperus communis hibernica (Irish)	
1-yr., 6 to 8 ins.	10.00
1-yr., 8 to 12 ins.	12.50
2-yr., 12 to 15 ins.	15.00
Juniperus communis Kiyonoi (Kiyonoi)	
1-yr., 8 to 12 ins.	12.50
2-yr., 12 to 15 ins.	15.00
Juniperus glauca Hetzi (Hetz)	
1-yr., 6 to 8 ins.	10.00
1-yr., 8 to 12 ins.	12.50
Juniperus horizontalis plumosa (Andorra)	
1-yr., 6 to 8 ins.	10.00
1-yr., 8 to 12 ins.	12.50
Juniperus Sabina (Savin)	
1-yr., 6 to 8 ins.	10.00
1-yr., 8 to 12 ins.	12.50
2-yr., 8 to 12 ins.	15.00
Juniperus Sabina tamaricifolia	
1-yr., 6 to 8 ins.	12.50
1-yr., 8 to 12 ins.	15.00
Juniperus Sabina Von Ehron (Von Ehron)	
2-yr., 12 to 15 ins.	20.00
Juniperus Sylvester	
2-yr., 12 to 15 ins.	25.00
Juniperus Virginiana	
1-yr., 6 to 8 ins.	15.00
2-yr., 8 to 12 ins.	20.00

The same quality stock we have been offering the wholesale trade for the past 25 years.

Write for price list.

BYERS NURSERY CO.,
Chase, Ala.

LINING-OUT EVERGREENS.

Abelia grandifolia, 1-year, T.	\$15.00
Abies balsamea, 4 to 6 ins., X.	15.00
Abies Veitchii, 4 to 6 ins., X.	15.00
Arborvitae Bakeri, 10 to 14 ins., X.	25.00
Arborvitae bonita, 2-year, T., large.	25.00
Arborvitae Boothii, 4 to 6 ins., X.	17.50
Arborvitae Bonita, 6 to 8 ins., X.	22.50
Arborvitae Columbia, 8 to 12 ins., X.	27.50
Arborvitae elegantissima, 6 to 8 ins., X.	22.50
Arborvitae globosa, 6 to 8 ins., X.	22.50
Arborvitae nigra, 4 to 6 ins., X.	17.50
Arborvitae pyramidalis, 4 to 6 ins., X.	17.50
Arborvitae reticulata, 6 to 8 ins., X.	22.50
Berberis julianae, 4 to 6 ins., X.	18.00
Berberis julianae, 6 to 8 ins., X.	22.50
Berberis julianae, 10 to 12 ins., X.	35.00
Buxus japonica, 8 to 10 ins., X.	17.50
Buxus sempervirens, 8 to 12 ins., X.	27.50
Buxus suffruticosa, 4 to 6 ins., X.	20.00
Ilex crenata, 6 to 8 ins., X.	22.50
Ilex crenata, 8 to 10 ins., X.	22.50
Ilex rotundifolia, 4 to 6 ins., X.	17.50
Juniper, Andorra, 6 to 8 ins., X.	22.50
Juniperus Hetzi glauca, 6 to 8 ins., X.	22.50
Juniperus Hetzi glauca, 8 to 10 ins., X.	25.00
Juniper, Irish, 6 to 8 ins., X.	22.50
Juniperus sylvatica, 6 to 8 ins., X.	22.50
Juniperus Von Ehron, 14 to 16 ins., X.	30.00
Kalmia latifolia, 1-year, trays,	
2 to 4 ins.	18.00

Ligustrum lucidum (april) 6 to 10 ins.	22.50
Ligustrum lucidum (april), 8 to 10 ins.	22.50
Ligustrum lucidum (upr.), 6 to 8 ins.	22.50
Osmanthus Aquifolium, 3-in. pots.	20.00
Pyracantha C. Lalandi, 2 1/2-in. pots.	30.00
Regel Privet, 2-yr. beds	18.00
Regel Privet, 3-yr. beds	22.50
Retinispora ericoides, 6 to 10 ins., X.	25.00
Retinispora filifera, 6 to 8 ins., X.	22.50
Retinispora Goldiust, 8 to 10 ins., X.	27.50
Retinispora Juniperoides, 4 to 6 ins., X.	17.50
Retinispora plumosa, 6 to 8 ins., X.	17.50
Retinispora Squarrosa Veitchii, 6 to 8 ins., X.	22.50
Taxus cuspidata, 6 to 8 ins., X.	22.50
Taxus Halloran, 4 to 6 ins., X.	17.50
Taxus Hatfieldi, 4 to 6 ins., X.	17.50
Taxus Hatfieldi, 6 to 8 ins., X.	22.50
Taxus Hicksi, 4 to 6 ins., X.	17.50
Taxus Jeffreyi, 4 to 6 ins., X.	17.50
Taxus Jeffreyi, 6 to 8 ins., X.	22.50

Write for our complete list of stock. 25

per cent cash on C.O.D. orders. Free packing.

ESHAM'S NURSERIES,

Millsboro, Del.

TOP-GRADE LINERS.

	Each per 1000 rate
1-yr., field-grown 8 ins.	12 ins.
Andorra Juniper	\$0.10
Ashford Juniper	10 \$0.12
Compact Pfizer Jun.	15
English Juniper	16
Greek Juniper	12
Hetz Juniper	15 17 1/2
Irish Juniper	10 12
Polish Juniper	10 12
Pfizer Juniper	15 17 1/2

	2-yr. PER TRANSPLANTS
Ashford Juniper	15
English Juniper	16
Hetz Juniper	20 22
Irish Juniper	15
Compact Pfizer	18 20 25
Pfizer	15 17 1/2
Abelia grandifolia, 1-yr.	\$0.10
Ilex crenata rotundifolia, 4 to 6 ins.	12
6 to 8 ins.	15
Nandina domestica, 4 to 6 ins.	10
6 to 8 ins.	10
BED-GROWN: Hex 2 to 4 in., 2-yr.	25
15 to 36 ins.	10
Photinia serrulata, 1-yr., 8 to 15 ins.	10
Ligustrum lucidum comp., 1-yr.	10
12 to 18 ins.	10
Sargent Barberrry, 1-yr.	12
Magnolia grandifolia, 1-yr.	15

POTTED LINERS, 1-yr., under lath, 2 1/2-in. pots.

Potted Liners, 1-yr. under lath, 2 1/2-in. pots.	
ARBOVITAE: Berkman's Biota aurea nana, 18c; Biota bonita globe, 18c; Sibylli Arborvitae, 18c.	
JUNIPERS: Andorra, 15c; Canadian Golden depressa, 20c; Greek, 16c; Irish, 15c; Polish, 15c; Hetzi, 18c; Pfizer, 18c; Compact Pfizer, 18c; Von Ehron, 18c.	
TAXUS: Browni, 16c; Hicksi, 16c; mixed lot of cuspidata and capitata, 2-yr., 4 in pot, 25c.	
ILEX: Burfordi, 15c; rotundifolia, 15c; Bullata, 15c; East Palatka, 15c.	
NANDINA DOMESTICA, 15c; Euonymus japonicus, 15c.	

TERMS: 2 per cent discount for cash with order, free packing. Add 2c for each plant on orders for less than 250. Priced F.O.B. nursery.

WRITE FOR PRICES ON BAR STOCK.

WYMAN'S NURSERY.

Ph. Columbus 5221, Kolola Springs, Miss.

LINING-OUT STOCK.

	Per 1000
Ilex convexa Bullata, 1-year, in flats.	\$150.00
2-year, bed-grown	250.00
Azaleas, hardy Kurumes, for lining-out; all sizes. Ask for complete list.	
DIRKNA T AZALEA FARM.	
P. O. Box 453, 516 Stevens Ave., Ridgewood, N. J.	

EVERGREENS

	Each
Pfizer Juniper, TT. sold, sheared,	
8 to 11-in. spread.	\$0.40
11 to 14-in. spread.	.55
14 to 16-in. spread.	.65
6 to 8-in. bands.	.14 1/2
8 to 10-in. bands.	.20
Andorra Jun., bands, 6 to 10 ins.	.12 1/2
extra heavy	.16 1/2
Blue Hetz Jun., bands, 6 to 8 ins.	.12 1/2
8 to 10 ins.	.16 1/2
Greek Jun., bands, 6 to 8 ins.	.14 1/2
Savin Jun., bands, 6 to 10 ins.	.12 1/2
extra heavy	.16 1/2
Von Ehron Jun., bands, 8 to 10 ins.	.12 1/2
extra heavy	.16 1/2
heavy rooted, 8 to 10 ins. (topped).	.06
Spreading Jap. Yew, bands, 6 to 8 ins.	.20
Upright Jap. Yew, bands, 6 to 8 ins.	.20
Dwarf Jap. Yew (nana), bands,	
4 to 6 ins.	.18

BROADLEAFS

Euonymus coloratus, 6 to 10 ins., bare-root	
6 to 8 ins.	.03 1/2
Euonymus patens, small or large	
leaved, 6 to 10 ins., bare-root	.04
small leaved, bands	.10
DECIDUOUS, Bare-root.	
Blue-leaved Arctic Willow, 6 to 8 ins.	.06
Buddleia Snowbank, long spike,	
6 to 8 ins.	.06
Chinese Beauty-Berry (Calliarpia),	
6 to 10 ins.	.03 1/2
Desmodium penduliflorum, 6 to 6 ins.	.05
Deutzia gracilis, bands, 6 to 8 ins.	.12 1/2
Foraythia Lynwood Gold, 5 to 8 ins.	.08
Foraythia Spring Glory, 6 to 8 ins.	.04
Golden vicari Privet, variegated,	
bare-root, 6 to 10 ins.	.04
Privet, Regels, 6 to 10 ins.	.03 1/2
Weigela, dwarf, variegated; 3 to 5 ins.	.04
Weigela Eva Rathke, red; 4 to 6 ins.	.06
Weigela rosea, 4 to 6 ins.	.04

PERENNIALS

Lythrum Mordena Pink, 4 to 6 ins.	.03
Lythrum Mordena Pink, light field,	
September transplants	.06
all prices 50c or more total order 50c of a variety. Less than 50c, add 2c per plant.	
Book your order for spring.	
McNINCH GREENHOUSES	
St. Joseph, Mo.	

FIELD-GROWN EVERGREEN LINERS

	Per 100	Per 1000
Andorra Juniper, 1-year,		
6 to 12 ins.	\$0.12 1/2	\$0.10
Ashford Juniper, 1-year,		
6 to 12 ins.	.12 1/2	.10
2-year, 6 to 18 ins.	.17 1/2	.15
Faustigata Juniper, 1-year,		
6 to 12 ins.	.12 1/2	.10
2-year, 6 to 18 ins.	.17 1/2	.15
3-year, 12 to 30 ins.	.20	.17 1/2
Greek Juniper, 1-year,		
6 to 12 ins.	.12 1/2	.10
Irish Juniper, 1-year,		
6 to 12 ins.	.12 1/2	.10
2-year, 6 to 18 ins.	.17 1/2	.15
Pfizer Juniper, 1-year,		
6 to 12 ins.	.17 1/2	.15
2-year, 4 to 18 ins.	.32 1/2	.30
Pfizer Juniper compacta,		
1-year, 8 to 12 ins.	.17 1/2	.15
Sabina (Savin) Juniper, 1-year,		
6 to 12 ins.	.12 1/2	.10
2-year, 8 to 18 ins.	.17 1/2	.15
Abelia grandifolia, 1-year,		
6 to 12 ins.	.10	.07 1/2
2-year, 8 to 18 ins.	.12 1/2	.10
Pink Flowering Dogwood, 12 to 18 ins., bare-root, 1-year, 15c each.		
Double-flowering Peaches, 12 to 18 ins., 15c; 18 to 24 ins., 17 1/2c. Colors: Red, white, pink.		

Bed-grown Nandina seedlings, 3 to 4 ins.

\$50.00 per 1000; 4 to 6 ins., \$75.00 per 1000.

WHITE FLOWERING DOGWOOD

AMOUR RIVER NORTH PRIVET

CALIFORNIA PRIVET

Write for catalog.

We offer you well-rooted, well-graded, well-packed stock. 50 or more plants at 100 rate; 300 or more at 1000 rate. No charge for packing when cash accompanies order. All orders will be appreciated and given prompt attention.

NAUGHER NURSERY

Chase, Ala.

LINING-OUT STOCK

Grown in Dow-Fumed soil.

Priced per 100.

	5 to 8 ins.	8 to 12 ins.
Cedrus Deodara	\$12.50	\$15.00
Feljoa Sellowiana	12.50	15.00
Gardenia Mystery	8.50	10.00
Gardenia radicans	8.50	10.00
Gardenia stricta nana	8.50	10.00
Ilex angustifolia	15.00	17.50
Ilex myrtifolia	15.00	17.50
Ilex Bullata	15.00	20.00
Ilex rotundifolia	15.00	20.00
Ilex Burfordi	15.00	20.00
Ilex Posteri	15.00	20.00
Ilex East Palatka	15.00	20.00
Illicium anisatum	10.00	12.50
Ligustrum lucidum comp.	12.50	15.00
Loquat	15.00	17.50
Nandinas (transplants)	12.50	15.00
Osmanthus fragrans	12.50	15.00
Osmanthus yellow	12.50	15.00
Viburnum Tinus	12.50	15.00
Magnolia fuscata, 2 1/2-in. pots, 15c.		
Japanese flowering Cherry (red)		
12 to 18 ins.	\$20.00	
18 to 24 ins.	30.00	
2 to 3 ft.	40.00	

GRIMES NURSERIES

Semmes, Ala.

LINING-OUT STOCK—Continued

WE GUARANTEE SATISFACTION
FROM THESE TOP-QUALITY LINERS!
Priced per 100.

	6 to 8 ins.	8 to 12 ins.	12 to 15 ins.
Abelia Edw. Goucher.....	\$12.50	.....	.....
Buxus Harlandi.....	\$10.00	12.50	.....
Gardenia Mystery.....	.....	10.00	\$12.50
Gardenia radicans.....	8.50	10.00	.....
Gardenia stricta nana.....	8.50	10.00	.....
Ilex Cassine angustifolia.....	12.50	15.00	17.50
Ilex cornuta Burfordi.....	12.50	17.50	.....
(also available in potted liners)			
Ilex crenata microphylla.....	12.50	15.00	.....
Ilex crenata rotundifolia.....	10.00	12.50	.....
Ilex vomitoria femina.....	12.50	15.00	.....
Ligustrum lucidum compactum.....	.....	10.00	15.00
Loquat.....	.....	12.50	15.00
Magnolia fuscata.....	10.00	12.50	17.50
Osmanthus fragrans.....	12.50	15.00	.....
Photinia glabra.....	10.00	12.50	.....
Photinia serrulata.....	.....	10.00	12.50
4 to 6 ins.....	\$10.00	12.50	.....
Viburnum odoratissimum.....	.....	10.00	12.50
4 to 6 ins.....	.....	6 to 8 to	8 to
6 ins. 8 ins. 12 ins.	.....	(2-yr.)	.....

CONIFERS

	kiyonol	Juniperus communis	Juniperus glauca Hetzi	Juniperus Pfitzeriana	Juniperus sylvensis	Podocarpus sinensis
	\$10.00	\$15.00	\$17.50	10.00	15.00	17.50
	10.00	15.00	17.50	12.50	15.00	20.00
	10.00	12.50	17.50	10.00	15.00	17.50
	10.00	15.00	17.50	10.00	15.00	17.50

Write for our latest catalog listing many other liners, both potted and bed-grown and also container-grown stock.

COTTAGE HILL NURSERY

Rt. 4, Box 130 Mobile, Ala.

QUALITY LINERS.

	Per 100	Per 1000
3,000 Ampelopsis veltchii, 2-yr.	.....	.....
TT, F.R., 4 to 5 ins.	35.00	350.00
5,000 Azalea mollis, 2-yr. T.	25.00	200.00
5,000 Azalea mollis, 3-yr. T.	35.00	300.00
1,800 Cornus Kousa, 1-yr. S.	.....	.....
6 to 9 ins.	5.50	45.00
1,000 Euonymus radicans, 2-yr.	.....	.....
TT, F.R., 4 to 5 ins.	35.00	300.00
1,000 Euonymus radicans Carrierei, 2-yr. TT, F.R.	.....	.....
4 to 6 ins.	35.00	300.00
1,000 Hydrangea P.G., 1-yr. T.	.....	.....
9 to 12 ins.	15.00	140.00
1,500 Hydrangea P.G., 2-yr. T.	.....	.....
P.R., 12 to 15 ins.	30.00	250.00
3,000 Pieris Japonica, 1-yr. T.	10.00	90.00
1,000 Quercus borealis, 1-yr.	7.00	60.00
2,000 Rosa rugosa, 1-yr. S.	5.50	45.00
1,500 4 to 8 ins.	8.50	75.00
1,500 9 to 12 ins.	12.50	110.00
1,000 Wistaria sinensis, 1-yr.	.....	.....
S.	4.50	35.00
10,000 Rosa multiflora, 2 to 3 mm.	2.50	18.00
10,000 Rosa multiflora, grafting size	5.00	40.00
5,000 Rosa rugosa, 12 to 15 ins. T.	25.00	200.00
5,000 Rosa rugosa, 15 to 18 ins. T.	35.00	300.00
2,500 Thuja occidentalis, 2-yr. TT	7.00	60.00
T—once transplanted.	.....	.....
TT—twice transplanted.	.....	.....
F.R.—field row.	.....	.....

Samples mailed on request.
BOULEVARD NURSERIES,
Newport, R. I.

LINING-OUT STOCK

	6 to 8 ins.	8 to 12 ins.	12 to 18 ins.
Young, thrifty stock, bed-grown.	.....	.....	.....
Priced per 100	.....	.....	.....
Buxus Harlandi.....	\$10.00	.....	.....
Gardenia Mystery.....	8.50	\$10.00	\$12.50
Gardenia stricta nana.....	10.00	12.50	.....
Jasminum primulinum.....	7.50	10.00	.....
Ligustrum lucidum compactum.....	10.00	12.50	15.00
Magnolia fuscata.....	15.00	17.50	.....
Magnolia alba superba.....	.....	35.00	\$45.00
Magnolia Soulangeana.....	.....	35.00	45.00
Magnolia nigra.....	25.00	30.00	35.00
Nandina domestica.....	7.50	10.00	.....
Podocarpus sinensis.....	10.00	12.50	.....
Spiraea Reevesian (field).....	15.00	20.00	.....
Xyloaema, 3-in. pots.....	15.00	.....	.....
STEPHENS NURSERIES, Semmes, Ala.			

ILEX ROTUNDIFOLIA.

2-in. rosepot, 1-yr., 4 to 6 ins.	\$18.00 per 100
1 1/2-in. rosepot, 1-yr., 3 to 5 ins.	15.00 per 100
FORSYTHIA LYNNWOOD GOLD.	
Rooted cuttings.....	12.00 per 100
4-in. pots.....	18.00 per 100
No. 1 field.....	30.00 per 100
Rooted cuttings.....	10.00 per 100
PRIVET VICARI.	
2-in. pots.....	15.00 per 100
Rooted cuttings.....	10.00 per 100
EDWARD GILSON & SON NURSERY, U. S. Rt. 20, Perry, O.	

LINING-OUT STOCK

	Each
Abies Pinsapo, 3-in. pot.....	\$0.35
Daphne Coccinea, 2-in. pot.....	.20
Daphne odora, 2-in. pot, 1-yr.....	.25
Daphne odora, 3-in. pot, 2-year.....	.45
Daphne Mezereum, S.....	.07
4 to 6 ins.....	.12
6 to 8 ins.....	.15
8 to 10 ins.....	.20
12 to 14 ins.....	.30
12 to 15 ins., br. and budded.....	1.25
Gentiana acaulis, single div.....	.12
Juniperus tamaricifolia, 4 to 6 ins., X.....	.12
6 to 8 ins., X.....	.15
8 to 10 ins., br., X.....	.27
Japanese Maple, 2-yr., S.....	.10
Norway Spruce, 3-in. pot, 10 to 12 ins.....	.35
Pieris Japonica, 4 to 6 ins., br.....	.15
Thuja woodwardii globosa, 8 to 10 ins., br., X.....	.25
Viburnum Burkwoodi, 6 to 8-in., 1-year, potted.....	.25
Raphiolepis ovata, 2-yr., T.....	.18
Cash with order, please.	
FOUR STAR NURSERY, 8215 238th., S.W. Edmonds, Wash.	

LINING-OUT STOCK.

Nice, healthy, well-rooted stock.
Priced per 100.

	6 to 8 to 8 to 12 ins.
Buxus Harlandi.....	\$12.50
Buxus japonica.....	12.50
Buxus sempervirens.....	12.50
Cedrus Deodara.....	12.50
Elaeagnus Fruitlandi.....	12.50
Eriobotrya Japonica (Loquat).....	12.50
Feijoa (Pineapple Guava).....	12.50
Gardenia Fortunei.....	7.50
Gardenia Mystery.....	7.50
Gardenia radicans.....	7.50
Ilex cornuta Burfordi.....	15.00
Ilex crenata convexa (bullata).....	15.00
Ilex crenata rotundifolia.....	15.00
Ilex vomitoria (Yaupon).....	15.00
Magnolia grandifolia.....	10.00
Osmanthus fragrans.....	12.50
Retinospora ericoides.....	10.00
BLACKWELL NURSERIES, Semmes, Ala.	

Wholesale only.

LINING-OUT STOCK.

	Per 100	6 to 8 to 8 to 12 2 1/2-in. ins. ins. pot
Cleyera Japonica, 2-yr., ST.....	.....	\$15.00
Ilex C. Burfordi.....	\$15.00	\$17.50
Ilex cornuta Femina.....	15.00	17.50
Ilex C. convexa (Bullata).....	12.50	15.00
Ilex C. rotundifolia.....	10.00	12.50
Ilex glabra, CT.....	.....	15.00
Ilex opaca Burfordi.....	.....	15.00
Ilex opaca East Palatka.....	.....	17.50
Osmanthus Fortunei.....	12.50	15.00
Osmanthus fragrans.....	12.50	15.00
Pyracantha formosana.....	.....	17.50
Pyracantha C. Lalandi.....	.....	17.50
Per 100.....	8 to 12 12-18	15-24
Magnolia Soulangeana.....	\$25.00	\$30.00
Write for our descriptive list of our complete offering of Camellias, Azaleas, Magnolias and other ornamentals.		
OVERLOOK NURSERIES, INC., Crichton Station, Mobile, Ala.		

LARGE QUALITY LINERS

	Each	Each
3 to 4 years, field-grown transplants.	per 100	per 1000
Ilex crenata (Jap. Holly), 12 to 15 ins.....	\$0.65	\$0.55
Berberis Julianae, 10 to 12 ins.....	.50	..
Juniperus chinensis Hetzi, 12 to 15 ins.....	.50	.45
Thuja occ. pyramidalis, 12 to 15 ins.....	.35	.30
Thuja occ. nigra, 12 to 15 ins.....	.35	.30
Thuja occ. plicata, 12 to 15 ins.....	.35	..
Thuja occ. compacta, 8 to 10 ins.....	.35	.30
Cham. plumosa, 12 to 13 ins.....	.35	..
Cham. plumosa aurea, 12 to 15 ins.....	.35	..
BULK'S NURSERIES, Babylon, L. L. N. Y.		

LINING-OUT STOCK

	Per 100
Ilex crenata convexa, 3-in. pots.....	\$20.00
Ilex crenata rotundifolia, 3-in. pots.....	20.00
Ilex cornuta Burfordi, 3-in. pots.....	20.00
Ilex vomitoria (Yaupon, female), 3-in. pots.....	20.00
Ligustrum lucidum (wax-leaved), 3-in. pots.....	15.00
*Pyracantha formosana, 3 1/2-in. pots.....	30.00
Ready for field rows. No charge for packing.	
*Our Pyracantha is exceptionally nice. They are ready for containers or field, being well established in the pots with 10 to 15-in. top growth. Many of them have a few berries.	
GOLDSBORO NURSERY, GOLDSBORO, N.C.	

LINING-OUT STOCK.

Lonicera, dwarf (Clavey)	
Clavey's Dwarf, R.C., 11 to 12 ins.....	\$0.10
Lonicera Ruprechtiana, Manchurian Honey-suckle, R.C., 8 to 12 ins.....	.06
Crataegus Crus-galli, Cockspur Thorn, seedlings, 6 to 8 ins.....	.06
EUGENE A. de ST. AUBIN & BRO., INC., Box 1, Addison, Ill.	

LINING-OUT STOCK

Liners grown one year in outside beds.

	Per 100
Ilex rotundifolia, 4 to 6 ins.....	\$ 8.00
6 to 8 ins.....	10.00
8 to 12 ins.....	12.50
12 to 15 ins.....	17.50
Ilex crenata convexa, 4 to 6 ins.....	10.00
Ilex crenata convexa, 6 to 8 ins.....	12.50
Gardenia Mystery, 8 to 12 ins.....	10.00
Gardenia Mystery, 12 to 15 ins.....	12.50
Gardenia radicans, 6 to 8 ins.....	7.50
Gardenia radicans, 8 to 12 ins.....	10.00

WELCH BROS. NURSERY

Wilmer, Ala.

HEAVY, POTTED LINERS.

	Per 100
Berberis Julianae, 2 1/2-in. pots.....	\$22.50
Juniperus Pfitzeriana, 2 1/2-in. pots.....	15.00
Mahonia Bealei, 2 1/2-in. pots.....	15.00
Ilex cornuta Femina, 2 1/2-in. pots.....	17.50
Ilex cornuta Burfordi, 2 1/2-in. pots.....	15.00
Ilex crenata convexa, 2 1/2-in. pots.....	17.50
Ilex crenata Helleri, 2 1/2-in. pots.....	25.00
Ilex crenata Repandens, 2 1/2-in. pots.....	17.50
Ilex crenata rotundifolia, 2 1/2-in. pots.....	15.00
Immediate delivery, Cash with order.	
ALCOVA NURSERIES, COVINGTON, GA.	

PYRACANTHA COCCINEA LALANDI.

Hardy stock from selected fruiting plants.

2 1/2-in. pots, T., 6 to 8 ins., br.....	\$22.50
3-in. pots, TT, 8 to 10 ins., br.....	32.50

PYRACANTHA KASAN (supply limited).
Free packing, Cash with order.

Route 3, Jamestown, N. Y.

EUONYMUS ALATUS SEEDLINGS.

1 1/2 to 2 1/2 ft.

\$15.00 per 100.

Samples mailed on request.

BLUE RIDGE NURSERY.

R. D. 3,
Harrisburg, Pa.

NEW DWARF RED BARBERRY

CRIMSON PYGMY.
From 2 1/4-in. pots, \$25.00 per 100, \$225.00 per 1000.

2-year, field, \$60.00 per 100, \$500.00 per 1000.
Ask for general lining-out stock list.

THE COTTAGE GARDENS
Lansing 15, Mich.

FLORETUM FAMOUS ROOT LINERS.

Outside grown in rigorous Kansas weather. Evergreens, blooming shrubs, vines, perennials, new modern shade and ornamental trees. etc. Ask for new '55 catalog.

PRAIRIE SOUTHWEST FLORETUM,
Fall River, Kan.

BUDDLEIAS.

Dubonnet, wine-red, Babcock, white.
Strong 2 1/4-in., \$12.00 per 100, \$110.00 per 1000.
Free packing. Cash with order.

BABCOCK GARDENS,
Route 3, Jamestown, N. Y.

LINING-OUT STOCK.

See our Classified ad in this issue under Evergreens.

T. G. OWEN & SON, INC.,
Columbus, Miss.

LINING-OUT STOCK.

See our display ad elsewhere in this issue.
BROOKFIELD GARDENS,
U. S. Rt. 48, Delaware, N. J.

Start Your Offer Now
in the American Nurseryman
And Watch Sales Climb.

MAGNOLIAS

MAGNOLIAS, HEAVY 2-YEAR, CUTTING-GROWN.

	12 to 13 ins.	18 to 24 ins.
Alexandrina.....	\$0.35	\$0.40
Liliflora.....	.30	.40
Nigra.....	.30	.35
Pink Alba Superba.....	.35	.40
Rustica Rubra.....	.35	.40
Small-flowering Soul.....	.35	.40
Soulangeana.....	.35	.40
Grace McDade.....	.40	.50

SEMME'S NURSERIES

Semmes, Ala.

ORIENTAL MAGNOLIAS

Magnolia rustica rubra, Magnolia Soulangeana and Magnolia Soulangeana nigra. All 2-year, nice, heavy liners that are sure to please. Can be shipped any time prior to February 15.

	Per 100
8 to 12 ins., 2-yr. liners.....	\$25.00
12 to 18 ins., 2-yr. liners.....	30.00
18 to 24 ins., 2-yr. liners.....	35.00
2 to 3 ft., 2-yr. liners.....	45.00

BLACKWELL NURSERIES

Semmes, Ala.

Wholesale Only

If you don't find it listed here
Try a Want ad in the next issue
of the American Nurseryman.

PEONIES

GRAFTED TREE PEONIES.
ATHA NURSERY, WEST LIBERTY, O.

PEONIES.

	Quantities available	
	3 to 2 to 5-eye 3-eye	
Baroness Schroeder	115	40
Bunker Hill	190	70
Clairette	30	15
Duchess of Portland	70	15
Edulis Superba	275	175
Felix Crousse	335	109
Festiva Maxima	230	145
Georgiana Shaylor	40	20
Karl Roschfeld	85	55
Lady Alexandra Duff	92	83
L'Etincelante	33	40
Longfellow	95	70
Mme. de Verneville	60	25
Mons. Jules Elie	715	195
Nippon Beauty	30	45
Reine Hortense	69	33
Samuel Hughes	123	33
Sarah Bernhardt	40	45
Solange	6	40
Venus	155	90

3 to 5-eye, 25c; 2 to 3-eye, 18c. Cut from young block.

HILLENMEYER NURSERIES,
Lexington, Ky.

PHLOX

PHLOX SUBULATA (Creeping Phlox)
Admiration, dainty pink with white eye.
Alba, pure white flowers.
Astro, deep orchid-rose.
Blue Hill, showy pale blue.
Butterfly, white with lilac bluish, purple eye.
Crimson Beauty, classy cyclamen-red.
Sensation, pure pink with red eye.
Nice liners with roots from field clumps, \$5.00 per 100, \$45.00 per 1000, prepaid.
250 or more of a variety at 1000 rate.
Properly packed and labeled, and shipped transportation prepaid, Cash, please.

TANGLEWOOD FARM
Box 336-N Clinton, S. C.

PHLOX SUBULATA (Creeping Phlox)
Alba, pure white flowers.
Blue Hill, showy pale blue.
Butterfly, white with lilac bluish, purple eye.
Crimson Beauty, classy cyclamen-red.
Good-size, started transplants from field rows, \$10.00 per 100, \$95.00 per 1000, prepaid.
250 or more of a variety at 1000 rate.
Properly packed and labeled, and shipped transportation prepaid, Cash, please.

TANGLEWOOD FARM
Box 336-N Clinton, S. C.

HARDY PHLOX.

Strong 1-year plants, true to name.
Per 1000
BRIGADIER, carmine-red \$150.00
CHARLES CURTIS, intense red 125.00
LEO SCHLAGETER, scarlet 100.00
SIR JOHN FALSTAFF, salmon-pink, 150.00
Packing free. Minimum order 100 plants.
LOUIS COLAVECCHIO,
1487 North Ridge Rd., Painesville, O.

HARDY PHLOXES.

Write for price list and special prices on large lots. A 14x21 color Phlox poster with orders of \$15.00 or more.
MARVIN HOEZZE, R. 2, LYNDEN, WASH.
Growers of hardy Phloxes.

RHODODENDRONS

GRAFTED HYBRID RHODODENDRONS.
2000 2-year, bushy liners, excellent roots; 1-year, bedded and 1-year lathhouse-grown.
Reds: Dresselhuys, Rutgers, Betex, Caracatus, P. Den Ouden, Van Der Hoop, Broeke, Poleman, F. S. Rand, Sargent.
Pink: Roseum Elegans, White: Album Elegans, Lees Dark Purple, Parsons Gloriosum and many others.
Bed-run, 10 to 15 ins., \$1.75 each.
100 or more plants, \$1.50 each.
Above shipped in beetle zone only.
3000 1-year, bedded hybrid Rhododendron grafts: DR. H. C. DRESSELHUYS, excellent root system, 5 plants for \$4.50.
No beetle restriction.
1500 AZALEA MOLLIIS, true to color, bedded; red, orange, yellow, rose; 10 to 12 ins., \$1.50 each, bedded.
No beetle restriction. Express collect.
WINDY HILL NURSERIES,
Dr. C. R. Shuster, Owner,
Wood St., Phone 32744, Saltsburg, Pa.

RHODODENDRON HYBRIDS.

1-year, field-grown grafted plants, imported from Holland in the spring, \$75.00 per 100, \$350.00 per 500, \$650.00 per 1000 lot. List of varieties on demand.
VERKADE'S NURSERIES, Wayne, N. J.

ROSEBUSHES

ROSA MULTIFLORA.
Rooted cuttings for budding.
De-eyed for better root system.
\$32.00 per 1000.
Rooted cuttings for Multiflora hedging.
Cut back to 18 ins.
\$22.50 per 1000.
Special prices on quantity orders.
FELIX ZAMPINI & SONS,
Rose growers, Painesville, O.

ROSEBUSHES

2-year field-grown rosebushes for immediate or later shipment. All plants state inspected, dug and shipped fresh from our own fields. Tied in bundles of 10 of a grade and variety.
TERMS: Cash, or 25 per cent cash and balance C.O.D. Packing free.

PRICES
Lots of 100 to 500
No. 1 grade, 30c ea.
No. 1 1/2 grade, 23c ea.
No. 2 grade, 18c ea.

RED
Red Radiance
Ami Quinard
Etoile de Hollande
American Beauty
Cynthia
Poinsettia
Better Times
E. G. Hill
Francis Scott Key
PINK
Pink Radiance
Mrs. Chas. Bell
Editor McFarland
Shell Radiance
Columbia
Cynthia
Briarcliff
Doctor
POLYANTHUS and
FLORIBUNDAS
Cecile Brunner
Chatillon
Eblouissant
Katharina Zeimet
Golden Salmon
Red Ripples
Red Lafayette
Floradora
WHITE
Frau Karl Druschki
Kais. A. Viktoria
Caledonia
Konigin Luise
White American
Beauty

RED
Red Radiance
Ami Quinard
Etoile de Hollande
American Beauty
Cynthia
Poinsettia
Better Times
E. G. Hill
Francis Scott Key
PINK
Pink Radiance
Mrs. Chas. Bell
Editor McFarland
Shell Radiance
Columbia
Cynthia
Briarcliff
Doctor
POLYANTHUS and
FLORIBUNDAS
Cecile Brunner
Chatillon
Eblouissant
Katharina Zeimet
Golden Salmon
Red Ripples
Red Lafayette
Floradora
WHITE
Frau Karl Druschki
Kais. A. Viktoria
Caledonia
Konigin Luise
White American
Beauty

WELLS BROS. NURSERY
Box 625 Phone 12F4W Lindale, Tex.

HIGHEST QUALITY, FIELD-GROWN
ROSES.

No better or cleaner stock than Krider Roses. Properly fertilized, well-sprayed and dusted during growing season makes them vigorous and disease-free. Ideal for potting. Order now for immediate or later delivery. Satisfaction guaranteed.

RED
Etoile de Hollande
McGregory's Scarlet
Red Radiance
Crimson Glory
WHITE
K. A. Viktoria
Konigin Luise
F. K. Druschki
PINK
Betty Uprichard
Editor McFarland
Picture
Radiance
YELLOW
Mrs. P. S. du Pont
Yellow Condesa
Priced
2-year, No. 1 \$5.50 \$50.00 \$450.00
2-year, No. 1 1/2 4.50 37.50 350.00
Orders of 250 or more take the 1000 rate.
PATENTED TEA ROSES
Chrysler Imperial, red \$14.00 \$120.00
Festival, red thornless 10.00 85.00
Mirandy, dark red 10.00 90.00
Peace, yellow and pink 14.00 125.00
Sutter's Gold, deep gold 11.00 100.00
Buccanear, canary yellow 11.00 105.00
Helen Traubel, two-tone pink 14.00 120.00
Gen. Eisenhower, red 12.50 100.00
Mojave, orange 15.00 130.00
FLORIBUNDA ROSES
Fashion, pink-gold 10.00 90.00
Goldlocks, flesh and gold 9.00 75.00
Red Pinocchio, deep red 9.00 75.00
Pinocchio, pink 9.00 75.00
Lilbet, salmon 11.00 95.00
Ma Perkins, pink 10.00 90.00

THE KRIDER NURSERIES, INC.,
Middlebury, Ind.

THORNY ROSA MULTIFLORA.
We have about 750,000 very nice, upright seedlings, grown under irrigation.
2 to 3 mm. caliper \$10.00 per 1000
3 to 6 mm. caliper 16.00 per 1000
6 to 12 mm. caliper 30.00 per 1000
Bed-run, 2 mm. up 12.50 per 1000
10 per cent off on orders of 10,000 or more.
No packing charge. F.O.B. Vandalia, Ill.
MESTEL NURSERY
Route 2,
Vandalia, Ill.

ROSA MULTIFLORA SEEDLINGS.
We have 500,000 surplus, excellent crop Rosa multiflora, 2 to 6 mm. Write for prices stating quantity and size, or special price on row run, with guarantee of count and size and ask for samples, or call and inspect.
BROWNELL ROSES,
Little Compton, R. I.

ROSEBUSHES: Good assortment, No. 1, 30c; No. 1 1/2, 24c; No. 2, 18c in lots 400 and up. List on request. TATE NURSERY, Rt. 3, Tyler, Tex. Since 1935.

ROSA MULTIFLORA SEEDLINGS.
We have 500,000 surplus, excellent crop Rosa multiflora, 2 to 6 mm. Write for prices stating quantity and size, or special price on row run, with guarantee of count and size and ask for samples, or call and inspect.
BROWNELL ROSES,
Little Compton, R. I.

ROSEBUSHES: Good assortment, No. 1, 30c; No. 1 1/2, 24c; No. 2, 18c in lots 400 and up. List on request. TATE NURSERY, Rt. 3, Tyler, Tex. Since 1935.

ROSEBUSHES

No BETTER Rosebushes can be had from any source at any price. A trial order will convince the most skeptical. Roses may be shipped now or later.

RED
Red Talisman
Better Times
Red Radiance
Etoile de Hollande
Syracuse
Rouge Mallerin
Grenoble
Poinsettia
Ami Quinard
Chas. K. Douglas
PINK
Betty Uprichard
Editor McFarland
Columbia
Pink Radiance
Mrs. Chas. Bell
Doctor
Picture
Contrast
Numa Fay
TWO-TONE
Talisman
Pres. Hoover
Blaze Perkins
Condesa de Santiago
YELLOW
Golden Charm
Golden Dawn
Golden Ophelia
Soeur Therese
Luxembourg
Betty Grace Clark
Golden Santiago
PRICES: Bare-root, F.O.B. Overton, Tex.
Per 100 Per 1000
No. 1 32c ea. 28c ea.
No. 1 1/2 27c ea. 23c ea.
No. 2 18c ea. 16c ea.
INDIVIDUALLY WRAPPED, paraffin dipped, with picture tag for counter trade, 15c extra per bush. 3 in 1, No. 2, at 75c per pack. Cash with order, or 25 per cent deposit and balance C.O.D.

NEW LONDON ROSES
Box 876 Overton, Tex.

ROSES, ALL 2-YR., No. 1.
Patented Hybrid Teas.
Each
10-20 20-100
Chrysler Imperial (pat. No. 1167) \$1.40 \$1.25
Charlotte Armstrong (pat. No. 455) 1.25 1.12 1/2
K. T. Marshall (pat. No. 607) 1.00 .87 1/2
Lowell Thomas (pat. No. 595) 1.10 1.00
Mirandy (pat. No. 632) 1.25 1.12 1/2
Mojave (pat. No. 1176) 1.50 1.37 1/2
Nocturne (pat. No. 713) 1.10 1.00
Peace (pat. No. 591) 1.40 1.25
Stibalyat (pat. No. 758) 1.00 .87 1/2
Sutter's Gold (pat. No. 885) 1.25 1.12 1/2
Tallyho (pat. No. 828) 1.10 1.00

FLORIBUNDAS
Fashion (pat. No. 789) 1.10 1.00
Floradora60 .55
Queen Elizabeth (pat. No. 1209) 1.65 1.50
Peace Climber (pat. No. 932) 1.10 1.00
STANDARD NON-PATENTED ROSES.
Hybrid Teas, 2-yr., No. 160 .55
Ami Quinard E. N. Perkins
Caledonia Editor McFarland
Condesa de Santiago Golden Dawn
NON-PATENTED CLIMBERS60 .55
American Beauty, Blaze, New Dawn,
Paul's Scarlet Cl., Silver Moon,
WAYNESBORO NURSERIES,
Waynesboro, Va.

30,000 ROSEBUSHES.
2-year, quality plants.
28 of the better standard varieties.
All plants state inspected
and still in the field.
Hybrid Teas, Floribundas and Climbers.
Special price for the entire field.
D. R. BULLARD, GROWER,
1119 East Elm, Tyler, Tex.
Phone 2-0643.

ROSA MULTIFLORA JAPONICA.
Strong 8-in. well-rooted, 1-year, de-eyed cuttings, suitable for budding. A vigorous mildew resistant strain. \$30.00 per 1000. Sample on request.
MELVIN E. WYANT,
Rose Specialist, Inc.,
Mentor, O.

ROSEBUSHES
2-yr. plants
Grown, graded and packed to perfection.
Complete assortment of varieties.
WRITE TODAY FOR PRICES AND
BOOK YOUR REQUIREMENTS NOW!
ROSEMONT NURSERIES
D. L. Thompson, Owner
Dept. AN
Tyler, Tex.

ROSES.
KISSED BY THE BREEZES OF LAKE
ERIE, GROWN IN THE BEST LOCATION
IN THE NATION, WHICH GIVES THE
FINEST MATURED ROSEBUSHES.
Write today for variety and price list.
Rose growers for 34 years.
FELIX ZAMPINI & SONS,
Painesville, O.

ROSES.

Our own field-grown, budded on thorny multiflora seedlings. Fine root system for potting or retail sales. Old standard and new patented varieties. Hybrid Teas and Climbers. Ask for our list. We also have potted roses for spring sales. We grow 100,000.

DANEGGER'S HI-WAY NURSERY, INC.,
Box 336, Milford, Del.

NORTHERN OHIO GROWN ROSES

Naturally Matured—Conscientiously Handled
If you have not as yet received it, ask for our list of Hybrid Teas, Floribundas and Climbers in the newest and best varieties. For 30 years a consistently reliable source of finer roses.

GERARD K. KLYN, Inc.
Mentor, O.

ROSA RUGOSA.	100	1000
2000 1-year seedlings.....	\$5.50	\$45.00
1500 6 to 8 ins.....	3.50	75.00
1500 9 to 12 ins.....	12.50	110.00
5000 12 to 15 ins., T.....	25.00	200.00
5000 15 to 18 ins., T.....	35.00	300.00

BOULEVARD NURSERIES

Newport, R. I.

ARP-GROWN ROSEBUSHES, beautifully packaged for display or direct-to-garden mail order and bare-root for landscape. Service to nurseries for 25 years. Write for price list. ARP NURSERY CO., WHOLESALE GROWER, Box 867-A, Tyler, Tex.

ROSEBUSHES

Good roses will not be in oversupply. Early bookings are indicated. List now ready. Send for your copy today.

MARTIN'S ROSE NURSERY
P. O. Box 155 Tel.: 713 Arp, Tex.

ROSE STOCK

ENGLISH MANETTI.
6 to 9 mm., for grafting or budding.
\$36.00 per 1000. F.O.B. Nursery, England.
FARM-TIER'S ROSES
Bayport, L. I., N. Y.

SEEDS

1954 CROP

American Holly berries, \$1.00 per lb.; 10 lbs. or more, 90c per lb.

DECIDUOUS HOLLY (ILEX DECIDUA).

A beautiful ornamental plant with brilliant red berries all winter; also a wonderful understock for all varieties of American Holly, due to its massive root system which greatly increases growth and insures greater livability in transplanting. Berries \$1.25 per lb. Orders less than \$5.00, please add 50c for postage. All other orders prepaid.

WARREN AND SON NURSERY

Rt. 11, Box 512
Oklahoma City, Okla.

SEEDS.

Ligustrum amurense, \$1.00 per lb.
Ligustrum lucidum (Glossy Privet), \$2.00 per lb.

Ligustrum japonicum, \$2.25 per lb.

Nandina domestica, red berries, \$2.25 per lb.

Photinia serrulata, \$3.50 per lb.

Cherry-Laurel, \$1.00 per lb.

Hall's Japanese Honey-suckle, \$5.00 per lb.

Pyracantha yunnanensis, large red berries, \$1.50 per lb.

J. H. ELLIS,

209 Springdale, La Grange, Ga.

SURPLUS PERENNIAL SEEDS.

1954 crop, tested high germination. Per oz.

14 oz. Alyssum saxatile citrinum.....\$2.50

4 oz. Aquilegia Crispata Star.....3.00

6 oz. Aquilegia Mrs. Scott Elliott's.....2.50

8 oz. Delphinium English Hyb., mixed. 1.75

KINGWOOD NURSERIES, MENTOR, O.

NANDINA SEED (UNCLEANED).

\$2.50 per lb.

LAIRD'S NURSERIES,

R. F. D. 2, Richmond, Va.

Watch Your Results From

American Nurseryman Classified Ads.

SHRUBS AND TREES

NOW

ROOTED CUTTINGS

FOR SPRING DELIVERY

Cuttings taken from clean, healthy, vigorous plants and rooted by us in our own greenhouses. We are accepting orders for delivery April and May, 1955.

Ilex convexa Juniperus Pfutzeriana

Ilex rotundifolia Juniperus Andorra

Ilex microphylla Taxus Hickel

Ilex Helleri Taxus Hunnewelliana

Ilex Glass Taxus cuspidata

Ilex glabra Arborvitae pyramidalis

Ilex crenata (upright) Arborvitae Woodwardi

Buxus sempervirens

Ilex and Taxus.....\$85.00 per 1000

Junipers.....80.00 per 1000

Arborvitae and Boxwood.....75.00 per 1000

Shipped according to your directions. Shipping charges added to order. Packing free.

CONNER & AMOS, INC.

129 Dutch Road

Charleston, W. Va.

ROOTED CUTTINGS.
TRANSPLANTED IN FLATS.

Per 100 Per 1000

Azalea Hino Crimmon,	4 to 6 ins.....	\$15.00	\$125.00
Azalea Hinodogiri, 4 to 6 ins.....	15.00	125.00	
Pieris japonica, 4 to 6 ins.....	15.00	125.00	

ROOTED CUTTINGS.

1-YR. BEDDED.

Buxus sempervirens, 4 to 6 ins.....10.00

Euonymus patens, 4 to 6 ins.....10.00

Ilex Bullata, 4 to 6 ins.....10.00

Ilex crenata, 5 to 8 ins.....10.00

Ilex rotundifolia, 5 to 8 ins.....12.00

Juniper Andorra, 4 to 8 ins.....12.00

Juniperus hibernica, 5 to 8 ins.....10.00

Juniper, Pfützer, 4 to 6 ins.....12.00

Juniperus stricta, 4 to 6 ins.....12.00

Pachysandra.....4.00

Retinospora plumosa aurea, 6 to 8 ins.....10.00

Retinospora plumosa, 6 to 8 ins.....10.00

Taxus brevifolia, 4 to 6 ins.....10.00

Taxus cuspidata, 4 to 6 ins.....10.00

Taxus Hatfieldi, 4 to 6 ins.....10.00

Taxus Hickel, 4 to 6 ins.....10.00

Taxus repens, 4 to 6 ins.....12.00

Thuja globosa, 5 to 8 ins.....10.00

Thuja nigra, 4 to 6 ins.....10.00

Thuja Verbenacea, 5 to 8 ins.....12.00

TRANSPLANTS.

Thuja occidentalis, 5 to 8 ins.....10.00

Picea excelsa, 6 to 8 ins.....6.00

Picea excelsa, 10 to 15 ins.....15.00

Picea pungens glauca, 4 to 6 ins.....7.00

Picea, white spruce, 6 to 8 ins.....4.00

Cornus canadensis, 5 to 8 ins.....10.00

Tsuga canadensis, 8 to 10 ins.....15.00

Tsuga canadensis, 10 to 12 ins.....20.00

1-YEAR SEEDLINGS.

Acer palmatum, 6 to 8 ins.....4.00

Cornus florida, 10 to 15 ins.....4.00

Cornus Kousa, 6 to 12 ins.....4.00

Taxus capitata.....5.00

Taxus capitata (transplanted).....6.00

2-YEAR SEEDLINGS.

Berberis atropurpurea, 4 to 6 ins.....5.00

Douglas Fir, 3 to 5 ins.....4.00

Ilex crenata, 4 to 6 ins.....4.00

3-YEAR SEEDLINGS.

Balsam Fir, 3 to 5 ins.....4.00

Picea excelsa, 4 to 6 ins.....3.50

Picea pungens glauca, 4 to 6 ins.....4.00

Picea, White Spruce, 4 to 6 ins.....3.50

Pinus Strobus, 4 to 6 ins.....3.50

Pinus sylvestris, 4 to 6 ins.....3.50

Pinus, white Mugo, 3-in.....4.00

Thuja occidentalis, 3 to 4 ins.....5.00

Thuja orientalis, 8 to 12 ins.....3.50

Tsuga canadensis, 3 to 4 ins.....6.00

Tsuga caroliniana, 3 to 4 ins.....6.00

2-YEAR TRANSPLANTS.

Azalea Hinodogiri.....\$30.00

Azalea Hino Crimmon.....30.00

Azalea mollis.....15.00

POTTED GRAFTS FOR SPRING 1955.

Cornus florida alba plena.....\$50.00

Cornus florida pendula.....50.00

Cornus florida rubra.....50.00

Cornus florida rubra Prosser.....65.00

Picea pungens Moerheimi.....100.00

Picea pungens Kosteriana.....100.00

Pinus Cembra.....50.00

Pinus parviflora glauca.....50.00

Pinus Strobus nana.....50.00

Pinus Strobus pendula.....50.00

Tsuga canadensis Sargentii.....50.00

VAN DINE NURSERY,

Berden Ave., Frenckness, N. J.

ORNAMENTALS, HEAVY BED-GROWN

4 to 6 ins. 6 to 8 ins. 8 to 12 ins.

Buxus Harlandi.....\$0.10

Buxus japonica.....\$0.12

Buxus sempervirens......10

Cleyera japonica......12 1/2

Nandina, ST......10

6 to 8 ins. 8 to 12 ins. 12 to 18 ins.

Elaeagnus Fruticosa.....\$0.12

Elaeagnus pungens......12 1/2

Eurya japonica......12 1/2

Feljoa Sellowiana......10

Flowering Cherry......20

Ilex Cassin......12 1/2

angustifolia......15

Ilex rotundifolia......15

Jasminum,......10

primulinum......10

Cherry-Laurel, ST......10

English Laurel......10

Ligustrum ciliatum......10

var......10

Ligustrum Erectum......10

Ligustrum Japonicum......05

Ligustrum repandum......10

Photinia glabra......10

Viburnum odoratissimum......10

Retinospora ericoides......10

Magnolia fuscata......12 1/2

Ilex cornuta......15

Burfordi......15

POTS

Euonymus.....\$0.15

Ilex cornuta Burfordi, 2 1/2-in., 2-yr......20

Ilex cornuta femina, 2 1/2-in., 2-yr......20

Jasminum Florida, 2 1/2-in......15

Oleandra, red, 3-in......17 1/2

SEMMES NURSERIES

Semmes, Ala.

SHRUBS AND TREES.

100

Azalea mollis, 3-yr., T., heavy, sheared, bushy; 12 to 15 ins.....	\$70.00
3-yr., 10 to 12 ins.....	55.00
2-yr., lining-out stock.....	10.00
2-yr., 6 to 8 ins.....	20.00
2-yr., 8 to 10 ins., bushy.....	25.00
2-yr., 10 to 12 ins.....	35.00

Ilex convexa, 2-yr., T., heavy, sheared, bushy, 6 to 8 ins.....20.00

2-yr., 8 to 10 ins.....30.00

2-yr., 10 to 12 ins.....40.00

Thuja occ., compacta and globosa.....10.00

2-yr., T., 6 to 8 ins.....10.00

2-yr., T., 8 to 10 ins.....15.00

Euonymus vegetus, 2-yr., T., lining-out.....10.00

8 to 12 ins.....20.00

Syringas (French Lilac): Florence Stepman, Rhum Von Hortenstein, Michel Buchner, Hugo de Vries, Ludwig Spaeth, Souv. de Ludwig Spaeth, Frea, Grevy, Charles X, Hugo Koster, Mme. Lemoine, Charles Joly.....\$70.00

10-in. up, 1-yr., buds, branched.....30.00

1 to 2-ft., 1-yr., buds, branched.....40.00

12 to 15 ins., 2-yr. buds, bushy.....55.00

15 to 18 ins., 2-yr. buds, bushy.....70.00

18 to 24 ins., 2-yr. buds, bushy.....85.00

2 to 3 ft., 2-yr. buds, bushy.....85.00

Ligustrum Amur River, 5 canes up, 18 to 24 ins.....13.00

2 to 3 ft.....17.00

3 to 4 ft.....25.00

Ligustrum ovalifolium, heavy, 3 ft.....15.00

Berberis Thunbergii atropurpurea.....10.00

2-yr. transplants.....10.00

Buxus sempervirens, 2-yr. transplants.....10.00

Pyracantha coccinea Lalandi, 1-yr. transplants.....17.50

Rhododendron hybrids, seedlings, 1-yr. transplants.....35.00

Ligustrum ovalifolium, 1-yr. transplants.....2.50

Taxus Hicksi, 1-yr. transplants.....15.00

Taxus cuspidata, 1-yr. transplants.....15.00

Ilex opaca, 1-yr. transplants.....35.00

Terms: Cash with order or cash free packing, or one fourth cash with order, balance before shipping or C.O.D.

LITTLE MOUNTAIN VIEW NURSERY,

R.D. 1, Rt. 84, Mentor, O.

FLOWERING CRAB APPLES

Crimson Brilliant (patent No. 939): 4 to 5 ft., 2-year trees, \$3.50 each; 3 for \$9.75; \$35.00 per doz.

1-year budded: Aldenham, atrosanguinea, Eleyl, floribunda, Hoppa, micromalus, purple, Scheidecker, atropurpurea, 3 to 4 ft., 80c; 4 to 5 ft., \$1.00; 5 to 6 ft., \$1.25. Whips 25 per cent less.

1-year budded: Arnold, Dolgo, floribunda, hupehensis, Parkman, Spec. alba plena, Zumi calocarpa, 2 to 3 ft., 80c; 3 to 4 ft., 90c; 4 to 5 ft., \$1.20. Whips 25 per cent less.

Sargent: 2 to 3 ft., 90c; 3 to 4 ft., \$1.35; 4 to 5 ft., \$1.65; 5 to 6 ft., \$1.90. Whips 25 per cent less.

1-year root grafts, all whips: Almey, Dorothea, floribunda, Katherine, Purple Wave, Redfield, Spec. Riversi, Spec. alba plena, Van Easline, 12 to 18 ins., 40c; 18 to 24 ins., 50c; 2 to 3 ft., 65c; 3 to 4 ft., 80c; 4 to 5 ft., 90c; 5 to 6 ft., \$1.10.

THUNDERCLOUD PURPLE-LEAVED PLUM:

Tree form, 3 to 4 ft., 75c; 4 to 5 ft., 90c; 5 to 6 ft., \$1.10; 6 to 7 ft., \$1.25.

CORNUS KOUSA CHINENSIS:

3-year seedlings (bare-root), 2 to 3 ft., \$1.00; 3 to 4 ft.,

SHRUBS AND TREES.		
Abelia grandiflora, 6 to 8 ins.	100	1000
8 to 12 ins.	7.50	\$ 60.00
12 to 18 ins.	20.00	175.00
18 to 24 ins.	35.00	300.00
2 to 3 ft. B&B.	75.00	700.00
Nandina, 15 to 18 ins. B&B.	75.00	
18 to 24 ins. B&B.	100.00	
24 to 30 ins. B&B.	125.00	
30 to 36 ins. B&B.	150.00	
Juniper, Andorra, 6 to 8 ins.		
field-grown	10.00	90.00
8 to 12 ins. field-grown	12.00	110.00
18 to 24 ins. B&B.	100.00	
24 to 30 ins. B&B.	125.00	
Juniperus Sabina, 6 to 8 ins.		
field-grown	10.00	90.00
8 to 12 ins. field-grown	12.00	110.00
18 to 24 ins. B&B.	100.00	
24 to 30 ins. B&B.	125.00	
California Privet, 6 to 12 ins.	20.00	
12 to 18 ins.	30.00	
18 to 24 ins.	40.00	
2 to 3 ft.	50.00	
3 to 4 ft.	75.00	
Spirea Vanhouttei, 12 to 18 ins.	7.50	60.00
18 to 24 ins.	10.00	90.00
2 to 3 ft.	15.00	140.00
3 to 4 ft.	25.00	225.00
Cherry-Laurel, 4 to 6 ins.	5.00	30.00
6 to 8 ins.	8.00	35.00
8 to 12 ins.	7.00	45.00
12 to 15 ins.	8.00	60.00
Roses, standards, No. 1.	35.00	300.00
No. 1 1/2	30.00	275.00
No. 2	25.00	200.00
50 varieties patented.		
Prices on request. CASH, PLEASE.		
BLUE SPRING NURSERY.		
Rt. 1, Box 704, Huntville, Ala.		
Robert L. Bradford.		

TO THE TRADE.

We offer the following surplus line potted liners, spring 1955.
TERMS: 2 per cent discount for cash with order, plus FREE PACKING. Usual terms, net 30 days. Cost of packing extra. No C.O.D. All stock offered is subject to prior sale.
25 or more at the 100 rate; 300 or more at the 1000 rate.

	Each.	Each.
	Per 100	Per 1000
600 Juniperus squamata Meyer.		
2-yr., 3-in. pots	\$0.30	\$0.25
1000 Juniperus squamata Meyer.		
2 1/2-in. pots	.20	.18
1000 Juniperus Hetzi glauca,		
2 1/2-in. pots	.20	.17
400 Juniperus excelsa stricta,		
2 1/2-in. pots	.20	.17
500 Juniperus Pfitzeriana,		
2 1/2-in. pots	.32	.20
1000 Euonymus patens LL.		
8x10-in., 2 1/2-in. pots	.18	.15
500 Euonymus radicans		
(Sarcocoe), 2 1/2-in. pots	.20	.18
1500 Buxus sempervirens,		
2 1/2-in. pots	.17	.15
300 Ilex crenata convexa,		
2 1/2-in. pots	.17	.15
300 Ilex crenata rotundifolia,		
2 1/2-in. pots	.17	.15

PEACE & SON NURSERY.

P. O. Box 304,
Siloam Springs, Ark.

KOREAN BARBERRY

An aristocrat of shrubs as specimen and for its yellow flowers and orange fruits in pendulant clusters.

Heavy 3-yr., field-grown, 30 to 36 ins.	Each
Priced to sell, 36 to 42 ins.	\$0.45

CORNUS MAScula (Cornelian-Cherry)	
30 to 36 ins.	.50
Heavy, 3-yr. plants, 3 to 4 ft.	.60

DEUTZIA LEMOTSI COMPACTA	
Heavy, 3-yr. plants, 18 to 24 ins.	.40

HYPERICUM KALMIANUM	
(Pot-O'-Gold)	
Hardy, bushy, compact, colorful. One of the finest low specimen shrubs.	

Compact, 2-yr. plants, 15 to 18 ins.	.40
--------------------------------------	-----

KOLKWTITZIA AMABILIS	
Heavy 3-yr. plants, 30 to 36 ins.	.50
36 to 42 ins.	.60

SILVER LACE	
No. 1 vines	.40
Medium grades	.30

Send for complete trade list.	
SCARFF'S NURSERY, New Carlisle, O.	

VIBURNUM CARLESI

This is the first time since the beginning of the war that we have been able to offer a supply of Viburnum Carlesi seedlings. All these years we have not been able to buy any seed and still cannot, but can offer these seedlings because we have our own seed by this time. We offer the following for spring, 1955:

Strong, 2-yr. seedlings	Per 100	Per 1000
4 to 6 ins.	\$15.00	\$125.00
6 to 8 ins.	20.00	175.00
8 to 12 ins.	30.00	250.00

Transplants, branched, mail-order size, 12 to 18 ins., \$75.00 per 100.	
---	--

C. HOOGENDOORN	
Turner Rd., Newport, R. I.	

NURSERY STOCK.

Pfitzer's Juniper, 1-year, 6 to 12 ins.	\$0.12
2-year, 8 to 15 ins.	.18
Euonymus patens, rooted cuttings.	.02
Euonymus patens, 3 to 5 ins.	.02

E. F. DuBOISE, HUNTSVILLE, ALA.	
---------------------------------	--

FRENCH HYBRID LILACS

All on OWN ROOTS; no grafts.
Vigorous, true to name, top quality; should make real specimen plants. Small surplus, beyond our present retail needs, available for spring shipment.

50 Congo, rich red-purple; 8 to 12 ins.	Each \$0.40
50 Congo, 12 to 18 ins.	.55
20 Congo, 18 to 24 ins.	.75
10 Lucie Baltet, shell-pink; 12 to 18 ins.	.55
10 Marengo, bright mauve-lilac;	
8 to 12 ins.	.40
15 Mme. F. Morel, rose-violet,	
8 to 12 ins.	.40

F.O.B. nursery, Cash with order. No packing charge. No orders for less than 5 of a kind.

UPTON NURSERY CO.,

Lilac Specialist

4838 Spokane, Detroit 4, Mich.

RED BARBERY SEEDLINGS.

EXCELLENT STRAIN.

6 to 9 ins., 2-yr. seedlings, \$40.00 per 1000.	
9 to 12 ins., 2-yr. seedlings, \$60.00 per 1000.	
12 to 18 ins., 2-yr. seedlings, \$100.00 per 1000.	

SILVER-MAPLE, NURSERY-GROWN.

200 6 to 8 ft., \$100.00 per 100.	
100 8 to 10 ft., \$125.00 per 100.	

CORNUS FLORIDA, heavy, well-branched.

400 3 to 4 ft., B&B, \$2.00 each.	
45 4 to 5 ft., B&B, \$2.50 each.	

AZALEA MOLLIS, heavy, very well-budded.

12 to 15 ins., B&B, \$1.35 each.	
15 to 18 ins., B&B, \$1.75 each.	
18 to 24 ins., B&B, \$2.00 each.	

DAPHNE CNEORUM.

50 12 to 15 ins., B&B, \$1.20 each.	
-------------------------------------	--

COOK'S NURSERY.

P. O. Box 266, Geneva, O.

COTONEASTERS AND BUDDLEIAS

Excellent finished landscape material.	Each, per 100
Cotoneaster divaricata, 3-yr., B&B	
2 to 3 ft.	\$1.75
3 to 4 ft.	2.00
4 to 4 1/2 ft.	2.50
Cotoneaster Zabelii, 3-yr., B&B, 2 to 3 ft.	1.50
Cotoneaster divaricata, 2-yr., L.O.S.,	
18 to 24 ins.	.37 1/2

Buddleias (Summer Lilac), well branched,

1-year.	
Charming, pink; 2 to 3 ft.	\$0.35
Dubonnet, lavender; 2 to 3 ft.	.35
Imperial Purple, purple; 2 to 3 ft.	.40
Red Velvet, red; 2 to 3 ft.	.45
Snowbank, pure white; 2 to 3 ft.	.35

FLORAL GARDENS, EATON, O.

PINK-FLOWERING DOGWOOD

6 to 12 ins., B.R.	Each \$0.50
12 to 18 ins., B.R.	.75
18 to 24 ins., B.R.	1.00
24 to 30 ins., B.R.	1.25
30 to 36 ins., B.R.	1.50
3 to 4 ft., 1-yr.	2.00
3 to 4 ft., 2-yr.	3.00

WHITE-FLOWERING DOGWOOD

12 to 18 ins., B.R., 2-yr., br.	Each \$0.08
18 to 24 ins., B.R., 2-yr., br.	.12
24 to 30 ins., B.R., 2-yr., br.	.25
30 to 36 ins., B.R., 2-yr., br.	.35

IKHAWKERSMITH NURSERY

Winchester, Tenn.

CHINESE ELM

2 to 4 ft.	Per 100 \$10.00
4 to 6 ft.	20.00
6 to 8 ft.	40.00
8 to 10 ft.	75.00
10 to 12 ft.	100.00

WASHAM NURSERY

Sweetwater, Tex.

PAPER BIRCH (Betula papyrifera)

3 to 4 ft.	Per 10 Per 100
4 to 5 ft.	\$4.00 \$35.00
5 to 6 ft.	6.50 60.00
6 to 7 ft.	7.00 65.00

WHITE BIRCH (Betula pendula)

3 to 4 ft.	\$4.00 \$35.00
4 to 5 ft.	6.50 60.00
5 to 6 ft.	7.00 65.00

WHITE BIRCH SEEDLINGS

6 to 9 ins.	Per 100 Per 1000
9 to 12 ins.	\$3.00 \$25.00
12 to 18 ins.	4.00 35.00
18 to 24 ins.	7.00 65.00

RIGBY NURSERY CO.

8941 N. E. Skidmore St.,
Portland 20, Ore.

LINING-OUT STOCK.

Buxus sempervirens,	Each
4-in. pot, TT.	\$0.50
Ilex latifolia, 4-in. pot, TT.	.50
Ilex opaca, 4-in. pot, TT.	.50
Pyracantha coccinea, 4-in. pot, TT.	.50
Taxus brevifolia, 4-in. pot, TT.	.50
Taxus cuspidata, 4-in. pot, TT.	.50
Taxus densiformis, 4-in. pot, TT.	.50
Taxus Hatfield, 4-in. pot, TT.	.50
Pin Oak, S., 1-yr.	.08

Washington Hawthorn,	
2-yr., S., 9 to 12 ins.	.20
Washington Hawthorn,	
2-yr., S., 12 to 15 ins.	.22 1/2

HOULIHAN NURSERY CO.,

Creve Coeur, Mo.

NURSERY STOCK.

Lombardy Poplar, 12 to 24 ins.	Per 100 \$4.00
900 2 to 3 ft.	6.00
900 3 to 4 ft.	8.50
700 4 to 5 ft.	12.00
200 5 to 6 ft.	15.00

AMUR RIVER PRIVET LINERS.

1 to 2 canes, small.	Each \$25.00
Row-run, 1 to 3 canes, 6 to 9 ins.	30.00

Amur River Privet seedlings.

15,000 2 to 4 ft., very bushy.	150.00
Pfitzer Juniper, 18 to 24 ins.	\$2.50 each
Pfitzer Juniper, 24 to 30 ins.	\$3.00 each
Biota aurea nana, 15 to 21 ins.	\$1.75 each

PAUL'S NURSERY.

R. D. 3, Phone: 32161, Shelby, O.

RED MAPLES

JAPANESE MAPLE SEEDLINGS

100 PER CENT RED

Well-hardened, branched transplants.

3-yr., XXX, 10 to 12 ins., SOLD OUT.	
2-yr., XX, 8 to 10 ins.	\$0.48 \$0.45
2-yr., XX, 10 to 15 ins.	.58 .55

Extra nice liners ready for open field planting. About pencil thickness.

A 20 per cent deposit will reserve your order.

HUBBS NURSERIES

Rt. 130, Riverton, N. J.

Specializing in maple seedlings.

250 JUNIPERUS HETZLI, heavy, 2 to 2 1/2 ft.	
500 Taxus cuspidata, 15 to 18 ins.	
2500 Taxus cuspidata, rooted cuttings, heavy.	
2500 Taxus Brownii, rooted cuttings, heavy.	
50 Birch, gray; 2 1/2 to 4-in. caliper.	
15 Birch, gray; multiple 1 1/2 to 3-in. caliper.	
15 Birch, white; 2 to 5-in. caliper.	
15 Juniperus glauca, 7 to 10 ft.	
300 American Arborvitae, 3 to 4 ft.	
2000 Azalea mollis, T.	

SHANER'S NURSERY.

Leesburg Rd., Rt. 56,
New Kensington, Pa.

EVERGREENS, B&B.

2000 Pyramidal Arborvitae, 3 to 4 ft.	\$2.95
1200 Andorra Juniper, 18 to 24 ins.	2.00
900 American Arborvitae, 2 to 3 ft.	2.25
300 American Arborvitae, 3 to 4 ft.	2.25
2000 Woodward Globe A. V., 15 to 18 ins.	2.00

DOGWOOD, WHITE FLOWERING.

900 Dogwood, 2 to 3 ft., B&B.	1.50
700 Dogwood, 3 to 4 ft., B&B.	2.25
345 Dogwood, 4 to 5 ft., B&B.	2.75
200 Dogwood, 5 to 6 ft., B&B.	3.50

Properly sheared, choice material. Please order early. Come and see us by appointment.

WHERRY'S NURSERIES, St. Marys, W. Va.

DOGWOODS.

Cornus florida rubra (pink-flowering Dogwood), 2 to 3 ft., 1-yr.	Per 100 \$125.00
Cornus florida plena (double white Dogwood)	
6 to 12 ins., 1-yr.	40.00
12 to 18 ins., 1-yr.	70.00

All of above Dogwoods budded on transplanted seedlings and grown under irrigation.

Cornus florida (white Dogwood)

18 to 24 ins., B.R., transp. seedlings	45.00
2 to 3 ft., B.R. transp. seedlings	65.00

BYERS NURSERY CO.,

Chase, Ala.

TREE SEEDLINGS.

Sugar Maple, 2 to 3 ft.	100 \$8.00 \$72.00
Red Maple, 2 to 3 ft.	8.00 72.00
American Linden, 2 to 3 ft.	9.00
White Birch, 2 to 3 ft.	8.00 72.00

Northern-grown in fertile sandy loam. Wonderful roots, straight, vigorous tops. Real ability to grow. Our 1954 planting of 18 to 24-in. White Birch, now averages over 5 ft. 250 or more at 1000 rate. Minimum order, \$25.00.

LONERGAN NURSERY.

Rt. 5, West Bend, Wis.

For \$3.50

you can offer that surplus in a classified ad of 10 lines on these pages—quickly and easily turning stock into cash.

AT 35c PER LINE

you can keep a list of specialty items before trade buyers through the selling season at small cost.

SHRUBS and TREES—Continued

KOLKWTITZIA AND OTHER SHRUBS.
Kolkwitzia, heavy, 2 to 3 ft., \$40.00 per 100; 3 to 4 ft., \$50.00 per 100.
Althaea, white varieties, 3 to 4 ft., \$25.00 per 100; 4 to 5 ft., \$35.00 per 100.
Cydonia, Deutzias, Forsythias, Spiraea, etc., all young, but heavy.

All shrubs freshly dug, no storage stock. Send for complete list of Azaleas, Evergreens, shrubs, trees. Quality stock at reasonable prices.

THE TANKARD NURSERIES,
Exmore, Va.

QUALITY STOCK.

	Per 100	Per 1000
Cherry-Laurel, 6 to 12 ins.	\$2.50	\$20.00
18 to 24 ins.	7.00	60.00
Yaupon Holly, 6 to 12 ins.	5.00	40.00
12 to 18 ins.	8.00	60.00
American Holly, 3 to 6 ins.	5.00	45.00
Live Oak, 12 to 18 ins.	5.00	40.00
2 to 3 ft.	10.00	
Magnolia grand., 4 to 8 ins.	7.00	60.00
Nandinas, trans., 4 to 8 ins.	6.00	50.00

L. H. BUTTER NURSERY,
Box 205, Forest Hill, La.

CHINESE ELM.

	Per 100
18 to 24 ins.	\$2.00
2 to 3 ft.	3.00
3 to 4 ft.	7.00
4 to 5 ft.	10.00

Heavy transplants. Each

5 to 6 ft., 1/2 to 3/4 in.	\$0.50
6 to 7 ft., 3/4 to 1 in.	.75
8 to 9 ft., 1 to 1 1/4 in.	1.25
10 to 12 ft., 1 1/4 to 1 1/2 in.	2.00

WEITZEL'S NURSERY,
North Platte, Neb.

SURPLUS OF THESE TOP-QUALITY LINES

Bargain prices to move a quantity. All from 2 1/2-in. pots. Per 100

2-yr. Burford Holly, heavy, 6 to 8 ins. and heavier	\$12.50
2-yr. Blue Spire Arborvitae	1.25
12 to 15 ins.	18.00
2-yr. Von Ehren Juniper, 12 to 15 ins.	18.00

Less than 300 total order, add 2c per plant.

BRADSHAW NURSERY,
League City, Tex.

LIST NOW AVAILABLE

Write for our new price list on shade trees, shrubbery and evergreens. Good-quality stock at prices you can afford to pay. For example: Compact plants, B&B.

Irish Juniper, 2 to 3 ft.	Each \$1.25
Pfitzer Juniper, 15 to 18 ins.	1.50
Nandina, 18 to 24 ins.	1.00

ROLLER'S NURSERY
Rogers, Ark.

2000 EUONYMUS ALATUS, 8 to 10 ins. Sturdy, branched plants, \$20.00 per 100.
700 Deutzia gracilis, 8 to 12 ins.
200 Philadelphus Lemoinei, 12 to 18 ins.
150 Philadelphus argenteus, 12 to 18 ins.
225 Philadelphus Enchantment, 12 to 18 ins.
600 Philadelphus virginiana, 12 to 18 ins.
400 Spiraea Anthony Waterer, 6 to 9 ins.
Above 1-year transplants, \$15.00 per 100.

JOHN BOS NURSERY
Clyde, O.

CHINESE ELM.

Seedlings and trees up to 3-in. caliper.

Good trees and attractive prices. Write.

OLSON'S NURSERY,
Huron, S. D.

300 WHITE ASH, LANDSCAPE SIZE.

(FRAXINUS AMERICANA.) SPECIMENS.
2 to 2 1/2-in. caliper.....\$7.00
1 1/2 to 2-in. caliper.....4.00
Limited quantity of larger trees.
Minimum order 10, packing at cost.

TERRASCAPE, INC.

612 Piccadilly St., Charleston, W. Va.

Rhododendrons, catawbiensis, 10 to 18 ins., \$1.00 to \$2.25. Carolinianum, 12 ins. to 2 1/2 ft., \$2.00 to \$5.00. Maximum, 10 to 18 ins., \$1.00 to \$1.85.
Leucothoe Catebaei, 8 to 24 ins, 75c to \$2.25. 4 to 8 ins., \$50.00 per 100.
Pieris, floribunda, 4 to 8 ins., \$50.00 per 100; japonica, 4 to 8 ins., \$50.00 per 100.
Azalea mucronulatum, 4 to 8 ins., \$50.00 per 100.
Louis A. Hindla, Bohemia, L. I., N. Y.

ONE-YEAR SEEDLINGS.

Silver Maple, 6 to 12 ins.	\$7.50
Silver Maple, 12 to 18 ins.	12.50
Silver Maple, 18 to 24 ins.	17.50
Silver Maple, 2 to 3 ft.	22.50
White Dogwood, 8 to 8 ins.	15.00
White Dogwood, 8 to 12 ins.	25.00
White Dogwood, 12 to 15 ins.	25.00

THE PARK NURSERY,

911 Pike St., W., Huntsville, Ala.

LINERS FROM OPEN BEDS. 1000 Live Oaks, 8 to 18 ins., \$35.00. Cherry-Laurel, 6 to 18 ins., 35.00. 50,000 of each on hand. Write for free sample.

CENTRAL LOUISIANA NURSERY,
P. O. Box 118, Forest Hill, La.

CHINESE ELM

Transplants, branched,

	Per 100
4 to 6 ft.	\$25.00
6 to 8 ft.	50.00
8 to 10 ft.	90.00

25 at the 100 rate. Liberal grading.

GRUNDY'S GARDENS

Anton, Tex.

We are closing out all our Hemlocks from 6 ins. to 8 ft. Finished and semi-finished; staked and sheared, single stocks, good. Also Rhododendrons, Kalmia latifolia, Arborvitae, Hetz Juniper, Azaleas, Colorado Blue Spruce and many others. Everything goes. First come, first served.

Highland Gardens, H. 3, Franklin, Pa.

1500 Ligustrum lucidum, 200 Elaeagnus Fruitlandi, 2 to 8 ft., \$1.60; 18 to 24 ins., \$1.35. 100 Ilex vomitoria femina (Yaupon), 18 to 24 ins., \$1.40. All B&B, heavy, sheared field stock. 150 Mimosa, 8 to 10 ft., \$1.00. 50 White Crape-Myrtle, 6 to 8 ft., br., \$1.00. Phone 2-4145.

Copeland Nursery, Beaufort, N. C.

ABELIA GRANDIFLORA

Heavily branched, excellent color.

	Per 100	Per 1000
18 to 24 ins.	\$35.00	\$300.00
2 to 3 ft.	40.00	350.00

Special discount on carload or truck lots.

CHIPOLA NURSERIES

Marianna, Fla.

HARDY LIVE OAK (Quercus Virginiana). Native in small area, Western Okla. Grown at Noble 20 years. Shines in drought; stood 12 below without a twig injured. Moves the Live Oak zone a lot northward. 1-year, field-grown seedlings, \$15.00 per 100.

NOBLE NURSERY, NOBLE, OKLA.

LIGUSTRUM LUCIDUM COMPACTUM.

(Wax-leaved Ligustrum.)

	Per 100	Per 1000
Well-rooted cuttings	\$3.00	\$25.00
12 to 14 ins., heavy, bed-grown	15.00	

COTTAGE HILL NURSERY.

Rt. 4, Box 130, Mobile, Ala.

DOUBLE PINK JAPANESE FLOWERING

CHERRIES (Kwanzan)

	Per 100
Strong 1-yr. grafts, 12 to 18 ins.	\$50.00
Strong 1-yr. grafts, 18 to 24 ins.	75.00

C. HOOGENDOORN

Turner Rd., Newport, R. I.

SHRUBS AND TREES.

See our Classified ad in this issue under Evergreens.

T. G. OWEN & SON, INC.,

Columbus, Miss.

CALIFORNIA PRIVET.

Fine well branched stock, 2 to 3 ft., 10c; 3 to 4 ft., 12c. Ready any time.

DANEGGER'S HI-WAY NURSERY, INC.,

Box 336, Milford, Del.

WHITE DOGWOOD, B&B.

Straight, heavy tops, 3 to 4 ft., \$2.50; 4 to 5 ft., \$3.00. Fine stock for the eastern trade.

DANEGGER'S HI-WAY NURSERY, INC.,

Box 336, Milford, Del.

NANDINA DOMESTICA SEEDLINGS

6 to 8 ins., \$8.00 per 100, \$70.00 per 1000.

PINKSTON NURSERIES

Parrott, Ga.

SEE OUR AD UNDER LINING-OUT STOCK.

NAUGHER NURSERY

Chase, Ala.

VEGETABLE ROOTS

VICTORIA RHUBARB ROOTS.

1/2 to 3/4 in., \$17.50 per 100.
3/4 to 1 in., \$25.00 per 100.
No charge for boxing. Can ship anytime.
ASHCRAFT'S NURSERY,
Copemish, Mich.

AMERICAN NURSERYMAN

GARDEN ROOTS

	100	1000
Victoria Red Rhubarb, No. 1 divs.	\$17.50	\$150.00
An excellent commercial red strain.		
Linnaeus Rhubarb, 2-year roots.		
5/8 to 1-in. cal.	\$6.50	\$50.00
1 to 1 1/2-in. cal.	8.50	65.00
1 1/2 to 2-in. cal.	10.00	90.00
2-in. up cal.	13.50	125.00
Paradise Asparagus, 2-year	3.00	22.50
heavy 3-year clumps	6.00	45.00
New Calif. "500", 2-year	3.50	25.00
heavy 3-year clumps	7.50	

All in storage for prompt shipment.

SCARFF'S NURSERY, New Carlisle, O.

ASPARAGUS ROOTS

	Per 1000
Mary Washington, 2-year plants.	\$17.00
1,000 to 5,000 plants.	17.00
5,000 to 10,000 plants	16.00
10,000 plants and over.	15.00
Approximate weight per 1000 plants, packed for shipment, 90 lbs.	
No packing charges for cash with order. Satisfaction guaranteed.	

PRITCHARD NURSERIES

Rt. 4, Ottawa, Kan.

ASPARAGUS AND RHUBARB ROOTS.

Asparagus Washington, strong, 2-year, well-graded, March digging, \$3.00 per 100, \$18.00 per 1000.
Rhubarb Victoria, a very good red; strong, heavy stems, grown 1-year from divisions. 2-in. crown and larger.

50 lbs. per 100 plants, \$6.00 per 50, \$10.00 per 100, \$90.00 per 1000. Samples.

ROUDESHUSH GARDENS,

4321 Needmore Rd., Dayton 4, O.

CHIPMAN'S CANADA RED RHUBARB

No. 1 divisions, by the 100 or 1000.

Write for prices.

CHAPMAN'S BERRY FARM

East Leroy, Mich.

Phone Athens PA 9-7779

VINES

CLEMATIS VINES.

	Each	per 10	per 100
Ernest Markham, petunia red	\$.50	\$4.50	
Duchess of Edinburgh, double white	.50	.45	
Ramona, blue	.50	.45	
Montana rubens, 3-in. pots	.35		

Cash with order, please.

FOUR STAR NURSERY,

8215 238th St., S.W., Edmonds, Wash.

HONEYSUCKLES.

Lonicera japonica Halliana, extra-heavy No. 1, 3 and 4-yr., 18 to 24-in. field plants, 3 and 4 leads, \$40.00 per 1000; lighter grade, \$30.00 per 1000; sample 100, \$5.00. Experienced labor for grading and packing quantity orders. Immediate shipment. No order too large.

ROBINSON NURSERY CO.

Greenville, Ga.

CONCORD GRAPE CUTTINGS, expertly cut and tied with wire, 100 to bunch. Cut from clean, well-sprayed vineyard, largest in Oklahoma. \$4.00 per 1000.
IDEAL FRUIT FARM, STILWELL, OKLA.

WANTED

WANTED—APPLE TREES.

Lowest prices on 1000 lots. Red and Yellow Delicious and Red Rome Beauty, for spring planting. Small true-to-name, well-rooted (if drought-hit short top), Apple trees for lining-out.

THE SPECIALTY NURSERY,

Tonasket, Wash.

SUPPLIES and SERVICES

BIRD FEEDERS

BIRD FEEDERS

Wild bird feeders and houses are big business. If located in a suburban or rural area, you can share BIG profits. Generous discounts, fast turnover and many repeat sales.

Write on your letterhead for Catalog HN.

McHUTCHISON & CO.

95 Chambers St., 311 S. E. Belmont

New York 7, N. Y. Portland, Ore.

BIRD FEEDERS OF CALIF. REDWOOD, natural finish, 7x8 ins., glass front, hinged roof for easy filling. Order in units: 6 for \$8.70; 12 for \$16.50. We can supply wild bird seed, 25 lbs. for \$4.95. Express collect. Samples, \$2.50, prepaid.

BIRCHWOOD GARDENS

Box 24, Phone 5737, Lowell, Mich.

Quick—Convenient—Cheap!

Selling through the Classified Ads

of the American Nurseryman.

CANS

CANS.

New 5-gal., 26 gauge cans for container growing quality nursery stock. Sold only in lots of 100 or more. Priced \$28.50 per 100, F.O.B. your truck.

NATIVE AMERICAN HOLLY FARMS,
Manheim, Pa.

FERTILIZERS

SOLUBLE FERTILIZERS

PETERS SPECIAL, 20-20-20, general purpose fertilizer.

PETERS SPECIAL, 21-7-7, azalea special, chelated iron.

\$6.00 per 25-lb. bag, \$20.00 per 100 lbs.

F.O.B. Allentown, Pa.

ROBERT B. PETERS CO.

739 N. 7th St., Allentown, Pa.

FLATS

MINNESOTA WHITE CEDAR FLATS

Order by No.	Wt. per 100	Price per 100
No. 1, 14x20x2 1/2	320	\$25.00
No. 2, 14x20x2 1/2	400	22.00
No. 3, 12x16x2 1/2	250	19.00
No. 4, 12x16x2 1/2	275	22.50
No. 5, 14x16x2 1/2	275	21.50
No. 6, 14x16x2 1/2	290	25.50
No. 7, 15x22 1/2x2 1/2	380	28.15
No. 8, 15x22 1/2x2 1/2	425	32.00
No. 9, 11 1/4x22 1/2x2 1/2	320	23.00
No. 10, 11 1/4x22 1/2x2 1/2	400	26.75
No. 11, 14x16x5	450	30.00
No. 12, 5x11x5	160	16.00
No. 13, 5x16x5	215	18.50
Plant boxes, 5x8 1/2x2 1/2	45	5.00

All other sizes quoted on request.
"One Time" flats of aspen, 75 per cent of above prices.
5 per cent discount on orders of 1000 or more.

The above measurements are inside. Bottoms and sides of cedar flats are 1/2-in. thick; ends are 3/4-in. Plant boxes are thinner. "One Time" flats are 5/16-in. sides and bottoms; ends 5/8-in. All material surfaced on one side.

Your name and address printed up to 3 lines in black ink, on one or both end pieces at the following rates: Set-up charge, \$1.00, plus 5¢ per piece for the first 1000 ends; 1/4¢ per end thereafter. Shipped knocked-down in units of 25.

All shipments by truck unless otherwise ordered. F.O.B. Cook, Minn. Attach check. H. C. HILL & SONS, Cook, Minn.

FLATS

Made from a good grade of southern Yellow Pine dipped in Rot Not wood preserver for longer life.

Standard specifications, inside measurements.	
16 1x2x2 1/2	\$20.38 per 100
16 1x4x3 1/2	27.06 per 100
20 1x4x3 1/2	26.51 per 100
20 1x4x3 1/2	31.07 per 100
22 1x5x2 1/2	30.49 per 100
22 1x5x3 1/2	35.35 per 100

All other sizes quoted on request. Prices F.O.B. Birmingham, Ala. We are manufacturers, not jobbers. Our quality guaranteed. Prompt shipment on any quantity. Mixed shipments of Flats, Plant Boxes and Spray Boards. Write for our price list on these items. Attach check to order.

HIGHTOWER BOX & TANK CO.

P. O. Box 1449
Birmingham 1, Ala.

REDWOOD FLATS, K. D.

Finest stock obtainable. Guaranteed all clear heart. Size 20x15x3 ins. inside measure, \$42.00 per 100.

1x1-in. Cypress stakes, pointed.
50 pcs. to bundle, 4 ft., \$3.50 per bd.
50 pcs. to bundle, 5 ft., \$4.50 per bd.
50 pcs. to bundle, 6 ft., \$5.50 per bd.
Ship same day. Cash with order, please.
YOHO & HOOKER, Youngstown 2, Ohio

Surplus Stock

can be easily and quickly turned into

by listing it in the
American Nurseryman Classified Ads.

LABELS

DAHLIA OR TREE LABELS

	Plain Painted	Per 1000
3 1/2 x 5 ins., notched (not wired)	\$2.50	\$3.00
3 1/2 x 5 ins., wired (copper)	3.30	4.10

POT LABELS

4x5 ins. (cartons 1000 each)	2.90	3.40
5x5 ins. (cartons 1000 each)	3.10	3.70
6x5 ins. (cartons 1000 each)	3.40	4.15
8x5 ins. (cartons 500 each)	5.00	6.20
10x5 ins. (cartons 500 each)	6.00	7.30

GARDEN STAKES

Price per carton.				
8x 7/8 ins.	(cartons 250 each)	1.85		2.15
10x 7/8 ins.	(cartons 250 each)	2.10		2.40
12x1 1/8 ins.	(cartons 100 each)	1.40		1.60

EVERMARK PENCILS

The original label marker. 1 dos. 7-in. pencils per box, \$1.25.

Our labels are perfectly white and smooth on both sides and are pronounced by growers the best and most economical.

"We ship the same day."

YOHO & HOOKER

Youngstown 2, O.

WOOD LABELS.

Finest grade. Smooth White Pine.

POT LABELS.

	Plain Painted	Per 1000
4x5 ins. (1000 per carton)	\$2.90	\$3.40
5x5 ins. (1000 per carton)	3.10	3.70
6x5 ins. (1000 per carton)	3.40	4.15
8x5 ins. (500 per carton)	5.00	6.20
10x5 ins. (500 per carton)	6.00	7.30
12x5 ins. (500 per carton)	7.00	8.50

GARDEN LABELS.

8x5 ins. (250 per carton)	7.30	8.50
10x5 ins. (250 per carton)	8.30	9.60
12x1 1/2 ins. (100 per carton)	14.00	16.00

TREE LABELS.

3 1/2 x 5 ins., copper-wired	3.40	4.20
------------------------------	------	------

CELLULOID LABELS.

3x1 1/2 ins., copper-wired, per box of 100	\$1.75
--	--------

WEATHERPROOF PENCILS.

Each, 10¢; doz., \$1.00; gross, \$10.00.

AMERICAN FLORIST SUPPLY CO.,

1335 W. Randolph St., Dept. N, Chicago 7, Ill.

NEW MODERN WAY TO LABEL

ALL NURSERY STOCK.

Self-adhesive; easy to use. No wire to tangle or girdle. Attractive, neat, low cost. Mounted on sheets. You can type, stamp, print or write the labels. Send for samples and prices at once.

MARMAX CO.,

Nashua, Ia.

MUSHROOM SUPPLIES

MAGIC MUSHROOM TRAYS.

The easy way to grow mushrooms, everything complete with instructions. Will yield from 2 to 4 months. Expressed, 2 trays, \$3.25. 6, \$9.00.

MELLINGER'S, INC., North Lima, O.

ORCHID SUPPLIES

OSMUNDA, LIGHT, DARK OR MIXED.

\$11.00 standard bale; 2 bales, \$21.00.

WIRE STAKES, No. 10 gauge galv. wire.

14 ins., \$2.80 per 100, 35¢ per doz.

18 ins., \$3.60 per 100, 45¢ per doz.

24 ins., \$4.80 per 100, 60¢ per doz.

CURSON POT WATERER, with aerator tip, \$7.50.

Curson spray, \$5.00. Curson spray head, \$1.50.

Priced F.O.B. Subject to change without notice.

WRIGHTWOOD FLORAL CO., INC.,

2407 N. Main St., Houston 3, Tex.

SPHAGNUM MOSS

NO. 1 SPHAGNUM MOSS.

Clean, long-fibered, standard bales; freight, express, or delivered by our trucks. Please price us before you buy. Satisfaction guaranteed.

WARRENS MOSS CO., Warrens, Wis.

STAKES

BAMBOO CANE STAKES

Dyed green, pencil thickness.

Packed 2000 per bale.

Per 1000 Per bale

1 1/2 ft. \$3.50 \$ 6.00

2 ft. 4.50 8.00

2 1/2 ft. 5.50 10.00

3 ft. 7.00 13.00

3 1/2 ft. 8.50 16.00

4 ft. 9.50 18.00

5 ft. 12.50 24.00

6 ft. 15.00 28.00

Per 1000 Per bale (5000)

12 ins. \$2.50 \$10.00

15 ins. 3.50 15.00

18 ins. 4.50 20.00

24 ins. 5.50 25.00

F.O.B. CHICAGO

Quantity discounts: 10 bales up, less 5 per cent; 25 bales up, less 10 per cent.

ALEC HENDERSON INC.,

1305 W. Randolph St., Chicago 7, Ill.

CYPRESS PLANT STAKES

80 Pieces to Bundle.

1x1-in.-3 ft., pointed, \$3.00 per bundle

1x1-in.-4 ft., pointed, 3.50 per bundle

1x1-in.-5 ft., pointed, 4.50 per bundle

1x1-in.-6 ft., pointed, 5.50 per bundle

1x1-in.-7 ft., pointed, 7.00 per bundle

These stakes are made of cypress and redwood, are good, strong stakes and will give long service. "A little better than seems necessary."

WE SHIP SAME DAY!

YOHO & HOOKER

Youngstown, O.

HEAVY BAMBOO STAKES

Per 100 1/2 to 1 in. 1/2 to 3/4 in. 3/4 to 1 in. 1 to 1 1/2 in.

4 ft. \$2.88 \$3.44 \$4.24

5 ft. 3.60 4.30 5.30

6 ft. 4.32 5.16 6.36

7 ft. 5.04 6.02 7.42

8 ft. 5.76 6.88 8.48

2000 up, less 5%; 5000 up, less 10%.

A. C. PATTERSON, Centertown, Ky.

STAKES, GALVANIZED HARD STEEL.

Galvanized Wire.

Prices and samples sent upon request.

SCHUPP SUPPLY CO., Wilmette, Ill.

TRADE BOOKS

TRADE BOOKS.

Suggestions for nurserymen and their employees:

NEW DESIGNS FOR SMALL PROPERTIES,

by M. E. Bottomley, \$4.00.

GREENHOUSES: THEIR CONSTRUCTION

AND EQUIPMENT,

by W. J. Wright, \$3.00.

STANDARD CYCLOPEA

OF HORTICULTURE

3-Volume Set

by L. H. Bailey, \$52.00.

AMERICAN NURSERYMAN

343 South Dearborn Chicago 4, Ill.

TEXAS TURF MEETING

Dedicated to the improvement and maintenance of golf course and other fine turf grasses, the Texas Turf Grass Association held a conference December 13 to 15, at the Texas A. and M. College, College Station. Dr. Ethan C. Holt, agronomist, was general chairman, and 154 registered.

The opening session included a talk on the principles of turf management, by Prof. H. B. Musser, agronomist, Pennsylvania State College, and a discussion of fungus in turf grass, by Dr. William Klomparens, Upjohn Co., Kalamazoo, Mich. Dr. Wayne Huffine, agronomist, Oklahoma A. and M. College, spoke on "Seed and Plant Certification." Factors influencing turf nutrition were discussed by Dr. H. E. Joham, plant physiologist, Texas A. and M. College.

Tuesday's session was divided into discussion groups on bent grass, park and cemetery grasses and athletic field and play areas. Panels of experts on various turf problems rotated from group to group.

The last day's session was devoted to turf research, with talks by Dr. E. C. Holt and Dr. Marvin Ferguson, United States Golf Association, greens section. Compaction studies of golf green soil mixtures were reviewed by Raymond Kunz, agronomist, Texas A. and M. College.

At the business meeting, the following officers were elected: President, Hughy Johnson, director of field athletics activities, Houston Industrial Schools, Houston; vice-president, Wylie Moore, superintendent of Stevens park golf course, Dallas; research director, Dr. E. C. Holt, agronomist, Texas A. and M. College; executive secretary, Robert L. Frazer, director of campus maintenance and development, East Texas State Teachers College, Commerce, and editor of Turf News of Texas, Albert W. Crain, agronomist, Texas Toro Co., Houston.

J. OSCAR BARRERA, who is with his father in Barrera's Nursery, McAllen, Tex., after two years' service in the army in Japan and Korea, was married December 17 to Christina Chapa, of McAllen.

GEORGE ZIEGLER, landscape extension specialist at the University of Wisconsin, conducted a series of three meetings for nurserymen and their sales personnel in the Racine-Kenosha area, in the county courthouse at Kenosha, Wis., January 13 and 20 and February 9.

WANTED and FOR SALE ADS

Help and Situation Wanted and For Sale Advertisements.

Display: \$4.00 per inch, each insertion.

Lines: 35¢ line; minimum order **\$3.50**.

SITUATION WANTED

Experienced landscape material salesman and designer. Student of reputable landscape school, accustomed to high earnings, seeks contact of mutual interests. Fluent talker, well educated, late model car. Address replies to Box 149, care of American Nurseryman.

SITUATION WANTED

Young, married man receiving certificate in 2-yr. nursery course at Penn State University in January wishes work in nursery propagation department. Served 4 years in army, no future service obligations in sight. Reply to Box 53, Fairview, Pa.

HELP WANTED

Experienced, middle-aged landscape gardener needed for small nursery in Pennsylvania. Good working conditions. Position open April 1. Write stating experience and salary expected. Address Box 128, care of American Nurseryman.

HELP WANTED

Experienced yardman wanted for large garden center on Chicago's south side. Knowledge of nursery stock essential. Must be ready to start work by March 15. Good salary; good working conditions. Address Box 141, care of American Nurseryman.

HELP WANTED

Growing nursery in upstate New York offers full partnership to capable man who will take full charge of landscaping department. Must have experience in landscaping and selling and know plants. No capital required. Unlimited opportunity for right man in prosperous area. Write Box 150, care of American Nurseryman.

WANTED TO BUY

A small garden center nursery with heeling space plus parking space. Location must be in the east or northern part of United States. Address replies to Box 147, care of American Nurseryman.

FOR SALE

Farquhar mist sprayer, \$300.00. Friend 20-g.p.m., 300-gal. sprayer, \$300.00. 5-h.p. electric irrigation pump and motor, \$300.00.

CHAS. P. McFARLAND
P. O. Box 246 North Aurora, Ill.
Phone: Aurora 8160

HELP WANTED—Good salary and bonus offered experienced landscape designer with ability in executing and supervising small landscape plantings. Established Long Island firm of landscape contractors has exceptional opportunity with sound future for aggressive, capable man able to assume responsibility. For interview, address Box 145, care of American Nurseryman.

WANTED TO BUY—Working partnership in going nursery after June 1, with view to taking over complete business in two years. Can offer now up to \$10,000 as share in business. Have wife experienced and capable in bookkeeping. Prefer west coast or southwest location. Send complete details to Box 151, care of American Nurseryman.

HELP WANTED

LANDSCAPE CREW FOREMAN

Preferably 20 to 35 years old, married and free of armed service obligation. Must have ability and responsibility to direct other men, ability to follow plans and sketches, knowledge of plant materials and plant requirements and enthusiasm for high-grade landscape work. Location is east coast, high-income community. When replying, state age, marital status, armed forces status, experience and education. Give references, earliest date available and enclose recent picture. Address Box 143, care of American Nurseryman.

HELP WANTED

LANDSCAPE SALESMAN

To join our landscape department. Capable of meeting public. No door-to-door selling; all leads furnished. Must be capable of drawing plans, making estimates and following each job through to final completion. Excellent spot for right man with leading mid-west nursery and landscape company. This is a permanent position with top salary. Write qualifications and include picture and photostats or copies of plans you have drawn. Personal interview will be arranged later.

THE SECOR LANDSCAPE CO.
3340 Secor Rd. Toledo 6, O.
Phone: LAwndale 2191

HELP WANTED

LANDSCAPE ARCHITECT

Old, well-established landscape company has opening for landscape architect. Graduate preferred, but general landscape experience will be satisfactory. Must have excellent references. Write giving full experience, education and salary expected. Write Box 148, care of American Nurseryman.

FOR SALE

Immediately available, good 4x6-ft. cypress hotbed sash, glazed, ready for use. Cash \$3.00 each, F.O.B. point of storage, as is. Also some similar sash which requires minor repairs. \$2.00 each; same terms. Will help load. Located at Muscatine, Ia. Also 250,000 used, but in good condition, spring steel triangular tomato basket clamps.

L. N. KLOPPMAN
H. J. HEINZ CO.
Pittsburgh, Pa.

FOR SALE

The southwest's finest tree mover. All hydraulic. Fast, safe and simple. Capacity 13,000 lbs. 7½-ft. ball. Mounted on 1948 International truck, flat stake bed for double use. Also Ford tractor back hoe attachment for digging trees and holes. Complete \$3300.00.

HILL'S NURSERY
P. O. Box 43
Victoria, Tex.

FOR SALE

Well-established landscaping and nursery business, Wheeling, W. Va. Several thousand healthy plants on a 4½-acre tract, including all tools, tool shed and equipment.

ROBERT A. WREN
604 Laconia Bldg. Wheeling, W. Va.

FOR SALE

Bean Roto-Mist shade tree sprayer. Like new in appearance and operation. The ideal equipment for Dutch elm spraying. Mounted on heavy-duty, factory-made trailer. Equipped with nozzle lights for night spraying. Can be purchased for \$2175.00 cash.

POWER EQUIPMENT SUPPLY

963 Park Place
Decatur, Ill.

FOR SALE

NURSERY AND FLORISTS' BUSINESS

\$80,000 yearly volume. Three almost new buildings with 7000 sq. ft. of floor space on 80x160-ft. lot. Ten blocks from Minneapolis loop. Two good parking areas. Will sell below cost of buildings. For information, call or write.

E. H. BOLSTER
2729 Hennepin Ave.,
Minneapolis, Minn.
Phone: Locust 3217

FOR SALE

Greenhouses, second hand. All sizes. Also all parts, glass and pipe for all purposes. We ship anywhere. We are greenhouse wreckers.

SEABOARD GENERAL SUPPLY CO.
P. O. Box 55 Hillsdale, N. J.
Phone: Waverly 6-0494

GREEN'S TRACTOR HOE



Green's tractor hoe will save you time and money. One man can do the work of many. Fits most makes of tractors.

Send for free literature.

HOWARD C. GREEN
Portland, N. Y.

COVER ILLUSTRATION

Picea Glehni

While *Picea glehni*, the Sakhalin spruce, was introduced before 1891, it has not been grown extensively in this country, and there has been little opportunity to observe its growth habit or adaptability.

The Sakhalin spruce is described as a handsome, narrow, pyramidal tree, reaching a height of 100 feet or more in its native habitat. The branches are short and slender, with attractive reddish-brown bark. The twigs are densely hairy. The terminal buds show a ring of awl-shaped scales at the base, such as is typical with the black and red spruces.

The needles are somewhat compressed and in cross section are broader than high with twice as many white, stomatic lines above as below. The needles are short, being one-quarter to one-half inch long, and they are dark green in color. *Picea glehni* is native of Sakhalin and Japan.

From limited observation the Sakhalin spruce appears to have about the same cultural requirements as the Norway spruce, *Picea abies*. It has been growing satisfactorily in northeastern Ohio. It is listed as being hardy in the most northern parts of the United States.

Its use will be as an attractive, specimen evergreen tree. L. C. C.

RESEARCH IN MARKETING

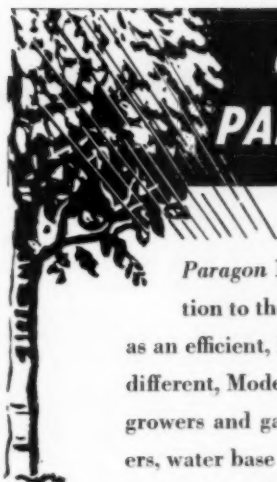
Plans are being made for a north-eastern regional research project in the marketing of ornamental nursery crops. Eight of 10 colleges represented at a conference in New York city, January 5, plan to participate in the project. A master plan is now being written. The various state projects will be so written as to come within the master proposal. These projects are dependent on additional research funds and will be started after July 1, 1955, if such funds are available.

Little marketing research has been done in the nursery field to date, although the importance of horticultural products justifies consideration of more work in the field.

The group indicated particular interest in such matters as the channels through which nursery sales are made, the extending of the sale period through use of canned and potted stocks, the dependence of sales on landscaping and planting services, effectiveness of different merchandising practices and present and potential consumer demand.

L. A. Dougherty,
University of New Hampshire.

easier with new PARAGON Power Sprayer

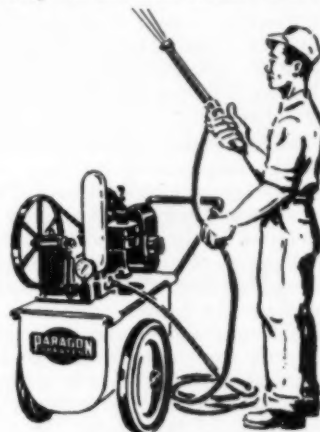


Paragon Model 353, illustrated below, the latest addition to the Paragon line, has already won high acclaim as an efficient, low-priced power sprayer. New and entirely different, Model 353 meets the needs of nurserymen, market growers and gardeners for spraying insecticides, weed killers, water base paints, white wash, water repellent solutions and other spray materials. 12-gal. tank. Latest-type gun delivers mist or 25-ft. stream.

Hydraulic-type pump mounted above the solution discharges up to 1½ gals. a minute. Double-bladed agitator keeps solutions mixed and strainer clean. Rust-protected tank is easy to fill and clean. Moves easily over rough ground on rubber-tired wheels. Four-cycle, ¾-HP gasoline engine.

The Complete Line

Write for new catalog F201 of all the Paragon Power and Hand Sprayers . . . famous for more than a quarter century. Please name your jobber when you write. Provide for your equipment needs now.



THE CAMPBELL-HAUSFELD COMPANY
503 State Street • Harrison, Ohio

CAMPBELL-HAUSFELD

SOIL STERILIZER

A simple, safe sterilizer for use in the bed, bench or potting soil. NO FURS. NO SOIL INSECTS. NO SOW BUGS. NO SLUGS. NO FUNGI. Ethylene dibromide in capsule form. 1 package of 200 capsules, \$3.39. 1 case of 12 packages, \$37.90. Satisfaction guaranteed.

HORTI-PRODUCTS CO.
HARBERTH 3, PA.



ULLMAN CLEAT

Strong, reliable, protects flowers from damage in transit, satisfies customers and insures better prices. The Ullman cleat grips sides of box, holds stems to bottom. Send for prices.

THE ULLMAN CO.
Northampton, Mass.

BEGINNING IN THE NURSERY BUSINESS

by J. J. Pinney. Complete series of articles. 50c.
American Nurseryman Chicago 4.

Twine and Cordage

For All Nursery Requirements

GEO. B. CARPENTER & CO.

SINCE 1840

401 N. Ogden Avenue, Chicago 22, Ill.

BURLAP NURSERY SQUARES

Cut from used burlap.
16x16 ins. to 40x40 ins.
Burlap and Burlap Strips
Cotton Net Onion Bag Squares
Prices on request.

GENERAL PACKAGE CORP.
229 Wright St. NEWARK 5, N. J.

the tried and true PERMARKER

Permanent
Garden
Markers



Durable plastic labels, 2 3/4" x 1 1/2" attached firmly to sturdy 14" non-corrosive steel supports. Easily removed for writing and other uses. Labels held at readable angle.

Always stay clean. Anchor prevents turning, accidental dislodgement and frost heaving.

Lead pencil writing lasts for years, but quickly erased for re-use.

Colors, harmonizing grey-green or conspicuous orange.

Attractively packaged. Nationally advertised. Advertising aids.

Write for discounts and free sample.

Retail prices
10 for \$ 1.40
25 for \$ 3.25
100 for \$12.25

Pat. No.
2,639,524

PERMARK

COMPANY, INC.

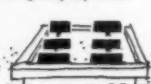
NEW Mark it PLANT MARKERS

HIGH QUALITY

LOW PRICE

The first low-cost plant marker combining all the essentials of good plant identification.

- ★ Molded of durable, weather-proof plastic. Nothing to rust, rot, or corrode.
- ★ Full 2 square inches of horizontal writing surface set at easy-to-read angle. Always remains clean. Overall height — 5 inches.
- ★ Harmonious grey-green color.
- ★ Lead pencil writing lasts for years, easily erased for re-use.
- ★ Anchors prevent accidental dislodgement and frost heaving.
- ★ Nationally advertised.
- ★ Low shipping costs.
- ★ Eye-catching display box.



Retail prices for high volume.

25 for \$1.25

100 for \$4.50

Write today for discounts and sample.

Room 1277, 1 East 57th Street, New York 22, N. Y.

hydrazide and NIX. He found that in one series Alanap gave the best results. In the taxus experiment considerable amounts of purslane were present, but it was readily controlled by a spray of 24 pounds per acre of NIX, which gave quick results, or seven and one-half pounds per acre of Chloro IPC, which was slower but lasted longer. Caution was exercised in applying both of these chemicals so as not to hit the plants' foliage, but some must have drifted, since leaves of *Viburnum rhytidophyllum* curled.

Mr. Pinney reported on work he had carried on last summer with chemical herbicides in the fields of the Evergreen Nursery Co., Sturgeon Bay, Wis. He cautioned the nurserymen that the environmental conditions of northeastern Wisconsin are quite different from Ohio and effects he realized might not be the same under Ohio conditions.

Application of Crag Herbicide 1 was made on a total of 20 evergreen species at the rate of four pounds per acre per application. A chart was distributed showing the various sizes of trees of a particular species which had been sprayed. These ranged from 2-year seedlings to 9 to 12-inch transplants. Some plots received up to four applications in the summer of 1954, and since each application was four pounds per acre, some plots received a total of 16 pounds during the summer. He went on to say that in no case had he been able to discern any injury to any of the 20 species from applications of Crag Herbicide 1. The species are as follows: White, Scotch, Austrian, Norway, mugho and ponderosa pine; Blue (seed-grown), Norway, white and Black Hills spruce; balsam and concolor fir; Douglas fir; red cedar; American, pyramidal and Woodward globe arborvitae; Pfitzer juniper; spreading and Hicks yews.

In addition to Crag Herbicide 1 he mentioned that several other chemicals were tested on nine species—White, Scotch and Austrian pine; white, blue and Norway spruce; red cedar; American arborvitae and concolor fir. These plants showed no injury after being sprayed with two applications of Crag, two and one-half pounds, plus Alanap, two and one-half pounds, per acre, or Sessin, four pounds per acre, or Natrin, one pound per acre. He did mention that CMU had been used at one-half pound per acre rates in conjunction with four pounds of Crag with no visible injury, but added a strong word of caution in saying, "The results obtained at the nursery, other than for Crag Herbicide 1, are at

WATCH for the newest **Ryan** POWER SOD CUTTER



ONE MAN CUTS AND
CROSSCUTS
25 sq. yds. of sod per minute. The New Ryan Power Sod Cutter with automatic cutoff unit eliminates all crosscutting!

... AND
SEE THE
NEW
IMPROVED
EDGER AND
TRIMMER

Safe trimming and edging...in half the time!

TRIMS COSTS... exclusive SPRING-FLEX BLADE gives Ryan the edge in lawn-grooming operations!

Write Dept. A-1 for complete information.

Ryan landscaping
Quality Built

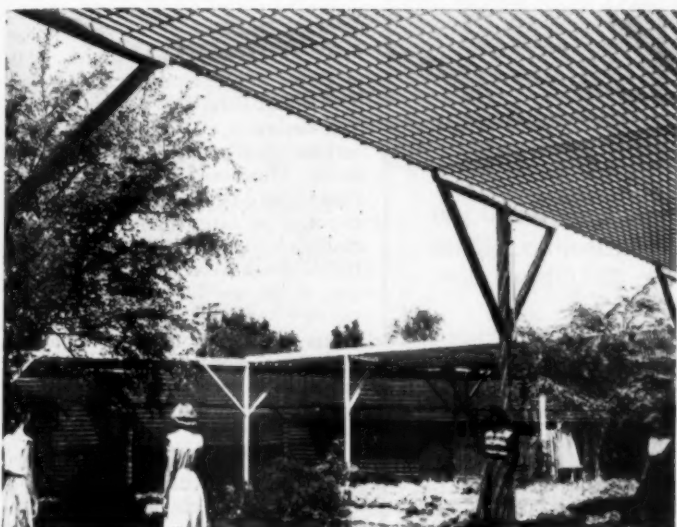
Division of
NIX Machine Works, Inc.

equipment company

871 Edgerton St.
ST. PAUL 1, MINN.



If You Need Shade . . . You Need ALUMALATH



PERFECT GREENHOUSE SHADING

Greenhouse manufacturers and both the small and large operators recommend inside installation as it is not affected by other conditions, gives perfect ventilation and eliminates costly glass painting.

ALUMALATH MEETS EVERY SHADE REQUIREMENT



For commercial displays, parking lots, patios, car ports and many others. The beautiful, long-lasting, baked enamel finish adds to the attractive appearance of any surroundings and gives the desired cool shade with minimum light loss and perfect ventilation.

For years, millions of feet of ALUMALATH have been in use by nurserymen and greenhouse operators in every part of the country and they highly recommend it.

WHY? The uniform sun intensity control assures better plants and production. It is all aluminum—the modern, long-lasting, lightweight building material—easy to erect, with no maintenance cost. It has perfect ventilation with ideal diffused lighting.



HARRY H. REYNOLDS Phone Kimberly 3-7337
2561-D Valencia St., Santa Ana, Calif.

Please send AlumaLath details and prices for

NURSERY _____ GREENHOUSE _____

COMMERCIAL _____ PATIO _____

Size: _____ ft. long; _____ ft. wide; _____ ft. high.

Shade desired for _____

NAME _____

STREET _____

CITY _____ STATE _____

SEND FOR THE FACTS TODAY!

ALUMALATH

HARRY H. REYNOLDS

2561-D Valencia St., SANTA ANA, CALIF.

JIFFY BALLING TRACTOR

6-ft. 2-in. Clearance



SHRUB DIGGER AND ROOT PRUNER

Tractor and root pruner cost you only \$4.00 per day, \$18.00 including driver and gasoline. Does work of 8 horses and 4 men costing \$84.00 per day.

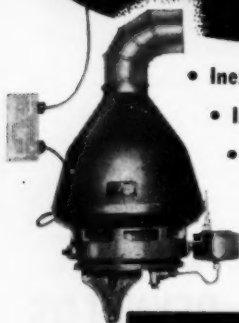
TRACTOR, SHRUB DIGGER AND ROOT PRUNER

Complete . . . **\$4995.00**

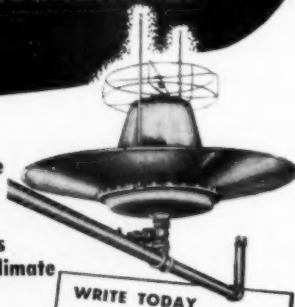
JIFFY BALLING CO., INC.
LONG LAKE, MINN.
Greenwood 3-9191

Please Mention AMERICAN NURSERYMAN When Writing Advertisers.

You Can Get Better Propagation with STANDARD Humidifiers.



- Inexpensive To Buy
- Inexpensive to Operate
- Easy To Install
- Automatic Controls
Maintain Proper Climate
for Plant Growth
- Fully Guaranteed



WRITE TODAY
for Bulletins and Prices
State Size of Greenhouse.

The STANDARD ENGINEERING WORKS

PAWTUCKET, R. I.

present still inconclusive, and we wish to withhold final comment pending further investigation, since several of these herbicides are extremely potent chemicals."

Mr. Pinney then described the method of application he used for applying these chemical herbicides. Slides were shown which illustrated the arrangement of the power-take-off pump, tank, valves and boom on the tractor used for spraying. He briefly described how the sprayer had been calibrated to spray approximately 50 gallons of liquid per acre at 40 pounds' pressure, with the tractor at full throttle in second gear. At this speed, he found, one man could cover one and one-eighth acres per hour, or nine acres per day. The boom used was eight feet long and designed to cover five rows, 12 inches apart, and the adjoining aisles. However, larger equipment could easily be designed if the pump capacity is large enough. He concluded by remarking that chemical herbicides have considerably cut the cost of the weeding operation at the nursery, and he urged other nurserymen to try chemical weed control, but cautioned them to exercise moderation by using small test plots first, and then later expanding their operations.

David Dugan, of Dugan Nurseries, a nurseryman with long experience in the field of chemical weed control, discussed his experiences concerning tolerance and methods of application. He pointed out the fact that even if a chemical did injure a few trees, perhaps it was not so severe as would have been caused by a 16-year-old boy with a hoe under normal weeding practices.

He had over 300 acres of nursery stock under Crag Herbicide 1 control last summer, and of the many different species only two showed injury, Hydrangea P.G. and Boston ivy. He went on to explain that it was an accident that Hydrangea P.G. had been sprayed, since they were being layered, and under these conditions he normally would not have sprayed them. As a result of the spray, the layers did not root. Flowering dogwood was injured by three to four times the normal application, which accidentally had been applied, but no injury occurred at the proper concentration. Boston ivy was definitely injured by the spray.

Mr. Dugan explained that he had controlled crab grass with three treatments of six pounds of Crag per acre, and he thought this observation warranted more experimentation in an effort to control the weed.

At this point Dr. Alban returned

NOW!
HERE'S THE TILLER
THAT MAKES ALL
OTHERS OBSOLETE

... new ball and cam differential with automatic lock and unlock gives you the easiest turning and steering you've ever known ... and positive 2-wheel traction under all use conditions!

Finger-tip controls plus instantaneous vertical and horizontal handle bar adjustment save time and work!



ARIENS
trans-A-matic
ROTARY TILLER

Never before has there been a heavy-duty rotary tiller like the new Ariens TRANS-A-MATIC. Its ball and cam differential, with automatic lock and unlock, keeps both wheels turning even if one bogs down in mud. It has a minimum turning radius of zero for effortless turning at end of row. It's instantly responsive to steering. Operates with automatic ball-type gear shift mounted on handle bar—no reaching, stooping, bending! Depth control has a snap-lock position control. Modified hoe-type tines—nonwinding, warranted nonbreakable! Two models: 8.1 Wis. engine—20-in. tillage; 14.6 Wis. engine—28-in. tillage. 2 speeds forward; reverse. See the TRANS-A-MATIC before you buy ... see why this new tiller—built by Ariens, America's first and foremost name in rotary tillage—makes all others obsolete!

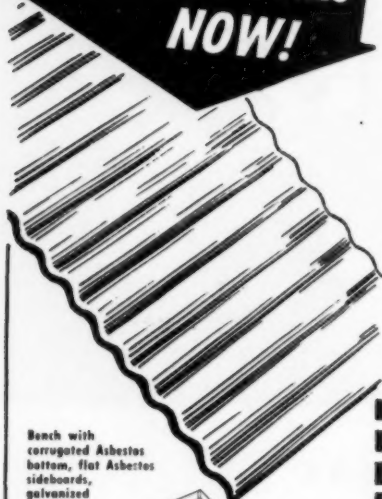


Write for descriptive literature today! Dealer inquiries invited.

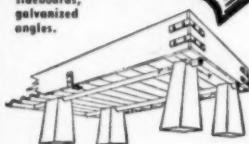
Ariens

**141 Calumet St.
 BRILLION, WIS.**

ORDER YOUR ASBESTOS BENCHES NOW!



Bench with
corrugated Asbestos
bottom, flat Asbestos
sideboards,
galvanized
angles.



Rough Bros.' is your guarantee of quality benches.

DURABLE — LONG LIFE — ELIMINATES FUNGUS GROWTH — WILL NOT CRACK WHEN STERILIZING.

Let us give you a quotation.

★ Write—wire or phone
for complete information
on Rough Bros.
Greenhouses.
ANY STYLE—ANY SIZE

STEAM-FLO Soil Sterilizer



MANUFACTURED
EXCLUSIVELY
BY

ROUGH BROS.
GREENHOUSE MANUFACTURERS & BUILDERS
4227 Spring Grove Ave., Cincinnati 23, Ohio
Phone Kirby 6180

FILL OUT COUPON

- Send me quotation on Benches
..... Send me information on Greenhouses
..... Send me information on Steam-Flo

Name.....

Address.....

City..... State.....

to conclude the panel discussion by describing four points to keep in mind when designing or buying spray equipment: (1) The speed of the tractor, (2) the spacing of the nozzles, (3) the pressure used and (4) the nozzle openings. He further pointed out that as herbicides become more and more selective, the need for mixing two or more together increases, and that every nurseryman starting on a program of chemical weed control must carefully understand the proper chemicals to use, the tolerance of the plants in the area to be sprayed and the correct method of application.

Container-Grown Stock

Arthur Lancaster, Coleman Nursery, Inc., Portsmouth, Va., discussed selling of container-grown nursery stock. As an introduction he reminded the nurserymen that, "It's not what a man does not know that gets him into trouble, but rather what he knows that is not so."

He pointed out that seven years ago the land he used as a nursery was so worn out that it became difficult to grow good nursery stock, and as a result he shifted over to growing plants in metal containers. The advantages of container growing over the conventional method are: (1) More plants can be grown on less acreage. (2) You can control your soil mixture better (he used 50 per cent peat, 25 per cent coarse sand and 25 per cent soil). (3) Since you use less acreage you can afford to irrigate, and thus drought has little affect on the product.

Mr. Lancaster then explained in detail his source of cans and how he prepared them for use. The cans were hauled in by a large truck from a syrup factory in a nearby city. They then entered an assembly line on which the covers were removed; the cans were soaked and washed, and labels were removed; the cans were buffed inside and out, after which three holes were punched near the base in each can by a machine and, finally, they were painted with an asphalt-base paint, dried and stacked. With this method of assembly line production, seven workers can process approximately 7,000 cans per eight hours.

Next Mr. Lancaster explained how they canned the plants. They start most of their own plants in greenhouses and then pot them into 2 1/4-inch pots. In April these plants are repotted into 1-gallon cans with the help of a potting machine. This machine and operators are capable of processing 4,500 potted trees per day.

WORK GOES FASTER, EASIER with SEYMOUR SMITH tools



The choice of tree men
for generations



No. 11
Pruner Head

Center
Cut
Action



"TELEPHONE" TREE PRUNERS

The very finest of tree pruners! Virtually unbreakable heads, selected spruce poles with positive locking, seamless aluminum joints. Simple, powerful action. No. 11-18, 1-in. capacity, \$16.25. No. 12-18, complete pruner 1 1/2-in. capacity, with 18-ft. pole, \$25.25. Extension sections available.



POLE PRUNING SAW

No. 20 SAW HEAD
Head only \$4.40
with 18-ft. pole \$16.25

16-in. needle-tooth saw blade fits in 3 different positions. Extra-large hook for pulling out loose branches. Paintbrush holder.



LOPPING SHEARS

6 models to choose from. Cut up to 2-in. branches with ease.

NEW, FINEST EVER PRUNING SAWS



A new Seymour Smith development—the fastest, easiest cutters on the market. Complete line of 6 models covering all requirements up to chain saw work.

FREE: Send for full descriptive matter and prices on all Seymour Smith products for professional pruning and tree care.



SEYMOUR SMITH & SONS, INC., 52292 Main St., Oakville, Conn.

The gallon cans can then be set out in beds of 15x150 feet with an 18-inch walk down the center and a 5-foot aisle between the beds. Approximately 3,000 cans fit into one of these areas.

In preparing the plants for the winter, he found by experience that the two most important factors in overwintering of can plants in the Virginia area are plenty of moisture and adequate nutrition through proper fertilization.

For watering he found that people with physical handicaps were reliable and accurate in performing this vital task. In fertilizing the plants, he stated, accuracy was of the utmost importance, and, therefore, he used a measuring spoon to apply the proper amount of fertilizer to each plant. The fertilizer was applied on a monthly schedule.

Mr. Lancaster emphasized the importance of knowing exactly what it costs to produce a given plant ready for sale. This, he said, is more easily done when assembly line production is utilized, such as he has been doing for seven years.

After producing the stock in cans, it must, of course, be sold to the public. For that purpose a retail salesyard was constructed, covering an acre or more. Several years ago he remarked that competition was becoming keen from truckers who sold off tail gates and through retail department stores. To counteract this, he placed a guarantee on all of his plants from time of purchase until October, which gave the customer protection through the summer at least. The guarantee was issued in the form of a card, which must be returned with the stock. This, of course, brought the customer back to the salesyard and usually he was sold additional stock.

His salesyard and how it operates were shown by slides. First of importance, he remarked, was to have a clean and neat area located near a well-traveled road. Then each plant should be labeled and priced. Self-service and a check stand for those customers who know what they want facilitates both the customer and the nurseryman. All of the benches are raised to allow for easier inspection by the customers. Only a few plants of a kind are on display at a time, since the customer has a hard enough time to choose as it is. The customer is not allowed into the growing area.

In conclusion Mr. Lancaster reminded the nurserymen that people who are happy and contented and can be made to forget their everyday problems will buy more; so he



Raking stones, roots and brush
Material is discharged in a windrow where rake quickly gathers it into piles.



Spreading topsoil
Rake is backed up to pile in high lift position, lowered into it and drawn away. Each bite takes away a large portion of the pile. Soil is spread rapidly and evenly.

Sturdy, versatile, efficient — does the work of a crew of men

The York RE Rake is the complete landscaping tool. Every lawn-building operation, from rough grading to final raking before seeding, can be done in a fraction of the time it takes a crew of men to do the same job. It rakes stones, roots and debris . . . grades and mulches . . . spreads topsoil . . . and even bulldozes! Grader blade attachment (optional) does terracing, ditching and driveway maintenance rapidly and efficiently. Sturdy, welded frame. Rake teeth are heavy duty, heat-treated, alloy spring steel. Fits all tractors with standard 3-point hitch. (Lighter Model RFA for use with IHC "Cub" and Massey-Harris "Pony" and "Pacer" Tractors)

Pays for itself. Saves buying costly extra equipment!

By virtually eliminating hand labor, the rake soon saves enough to pay for itself — often on the very first job! Practically the only tool you need. Saves investment in extra equipment — saves the expense of bringing extra tools to and from every job.

For literature and prices write to Dept. AN-254



The "HUMIDOMIST" System for INTERMITTENT MISTING

"Humidomist" Nozzles (the orifice is self-cleaning), under full automatic electric time control, promote rapid development of cuttings and plants, conserve water and save labor. Send for Circular No. 660, the Nurseryman's Special.

SUPREME ELECTRIC PRODUCTS CO.

194 Vassar St., ROCHESTER 7, N. Y.

Box 281, TORRANCE, CALIF.

ActivO puts LIFE in your SOIL!

Without the balance and dynamic energy of bacteria, biotics, hormones, enzymes, vitamins and trace minerals, your soil may be poorly productive and your plants more subject to disease no matter how many chemicals you use.

All-organic ActivO supplies these vital forces of Nature at low cost. Just mix it with mulches, fertilizers, seed — or directly into soil. TRY IT! Money-back guarantee. \$5.95 size energizes 6500 lbs. of fertilizers, etc.



BENSON-MACLEAN
BRIDGETON 2, IND.

GERMAN HORTICULTURAL PEAT MOSS

Gelco

LOW COST

HIGH QUALITY / Prompt Shipments

Bees in all popular sizes "Wholesale only"

For samples and prices Call **MU 2-3760**

or write to:

GELCO, INC. 9 E. 45th St., N. Y. 17

NEW FERTILIZE DEALER PROFITS YOURS FOR 1955!

USE-AND-SELL PLAN BRINGS SPECTACULAR RESULTS, BIG RETURN

High-analysis FERTILIZE soluble plant food has brought spectacular planting success to professional landscape men, nurserymen and home users. Lifetime-built FERTILIZE feeding devices provide the easiest, most effective method of foliar and root feeding for lawns, shrubs, trees and gardens. You can enjoy DOUBLE benefits from the proven FERTILIZE system... by USING it... and by SELLING it to your customers.



**ROOT
FEEDER**

A valuable heavy-duty tool for subsurface application of soluble and liquid fertilizers, lime, pesticides, etc. For trees, shrubs, lawns, etc.

WHEN YOU USE FERTILIZE...

... You effectively reduce planting failure and insure greater maturity of seeds and plants. You build customer confidence and satisfaction in your services. You save hours of labor when applying hydrated lime, insecticides, fungicides—and even Bluegrass seed—through precision FERTILIZE feeding units. Water pressure does all the work!

WHEN YOU SELL FERTILIZE...

... You create an extra source of profitable income, from both old and new customers. Repeat business in plant food alone builds steady, self-sustaining volume. Customers enjoy using foolproof FERTILIZE feeding tools... keep lawns, shrubs, gardens in top condition at all times.

SEND FOR DETAILS TODAY!

NUTRITIONAL CONCENTRATES, INC.
New Lexington, Ohio

I am a: ☐ Nurseryman ☐ Landscape Man
Send me complete information about the
FERTILIZE Landscape Man and Nur-
seryman Factory Dealership.

NAME.....

ADDRESS.....

CITY.....STATE.....

AN-3

has provided them with a clean and neat salesyard where soft semiclassical music can be heard in any area of the garden, in an attempt to condition their minds to buying.

Soil Maintenance

Harry L. Cook, manager of research and control department of Farm Bureau Cooperative Association, Inc., Columbus, O., who discussed "Systems of Soil Maintenance."

Mr. Cook defined soil as a place to support plants and added that clay and organic matter were the only soil particles which were of value chemically. He went on to tell what he believed to be the factors affecting growth.

1. Temperature—Cool temperatures slow growth. He pointed out that well drained soils warm up faster in spring than poorly drained soils.

2. Water—A good soil should consist of 50 per cent by volume of pore space, and of this one-half should be small pores (capillaries) for water holding and the other one-half large pores for holding air (non-capillaries). A good soil must have close to this structure, or the plants will either suffer from poor aeration or from lack of water.

3. Light—He felt control of light was not too important commercially.

4. Chemicals of the soil—Mr. Cook pointed out the importance of maintaining a pH near neutral for most crops, and he advocated the use of soil tests for elements such as phosphorous and potassium. He added that he felt that if all elements were brought up to a high level the plant would take care of itself.

In discussing organic matter he stated that it was of value for several reasons. 1. It increased water holding capacity. 2. It allowed better aeration by clumping the small clay particles together to form a popcorn ball structure. 3. It improves the chemical situation by addition of nutrients. 4. It increased the base exchange capacity and buffering capacity of the soil. 5. It is food for the microorganisms of the soil.

Mr. Cook then discussed the possible ways in which organic matter may be obtained, namely by buying it or growing it. He again emphasized the importance of having both organic matter, as well as the proper nutrients, in the proper amounts. He concluded by briefly discussing a few of the elements needed for plant growth.

The remainder of the afternoon was devoted to round-table discussion of three different subjects, prop-

TREE WOUND DRESSING

For the protection of wounds after pruning use Bartlett Tree Paint. Easily applied with ordinary paintbrush.

RETAIL PRICE—LESS THAN CASE LOTS

1/2-pt. can (48 per carton).....	\$0.60
1-pt. can (48 per carton).....	.90
1-qt. can (24 per carton).....	1.60
1-gal. can (6 per carton).....	3.50

**JOBBERS DEDUCT 50% FOR
CASE LOTS F.O.B. DETROIT**



This attractive steel display rack fully stocked costs you only \$7.25 F.O.B. Detroit. Retail value \$14.50. Refills at Jobbers' prices.

Here's a fast-moving specialty which sells to state highway depts., city and country parks, tree experts, cemeteries and fruit growers. Every tree owner is a prospect. Ask for catalog No. 35 for a full line of "Tree Trimming Equipment."

Rack Displays—6 1/2 pts., 5 pts. and 4 qts.

M-414 PRUNING SAW

The axe handle, which is especially made for this saw, is properly tapered to fit the head and is 36 ins. long.

M-414 Meylan Saw, complete with 16-inch blade\$12.00

M-414 Meylan Saw, complete with 18-inch blade\$12.50

Jobbers' Price

Jobbers Deduct 50% for dozen lots F.O.B. Detroit.

BARTLETT MFG. CO.
Box 58, 3003 East Grand Blvd.
DETROIT 2, MICH.

PERFECTION MARKERS ARE BETTER

for Park Trees, Display Gardens, Field use or Greenhouse Pots or Benches. Proven by thousands of users and every one a booster! You'll like them, too. They will stand for years at one marking, or may be changed any number of times for various markings. Send for catalog and prices of the complete PERFECTION LINE. The S-W Supply Co., 9, 32, Girard, Kas

Cut shows Plant Stake

NURSERY MANUAL, by L. H. Bailey.
Standard manual on propagation. 470 p., \$5.50.
American Nurseryman Chicago 4.

agation, plant materials and soil programs. All sessions operated simultaneously, and the discussions were very informal.

Propagation Round Table

The propagation round table was led by Lewis Lipp, Holden Arboretum, Mentor, Ohio, and other members of the group were Vincent K. Bailey, J. V. Bailey Nurseries, St. Paul, Minn., and Laddie J. Mitiska, Mitiska Nursery, Amherst, Ohio. Many excellent and thought-provoking questions were discussed.

Mr. Bailey was asked briefly to explain his firm's methods of propagation. He stated that for greenhouse propagation he used the Binks system of humidification and plants the cuttings directly into the field after rooting. He is now doing a considerable amount of propagation under mist in a lath house.

Mr. Mitiska gave a rather comprehensive report on how he uses coldframes to propagate ilex and taxus. He discussed how to make the cuttings and grafts, when to take them, how the frames were prepared, how the cuttings were watered and finally, winter protection.

The propagation of evergreen azaleas was discussed at length by Mike Sebian. He emphasized the success he has had is primarily due to the fact that he takes his cuttings at exactly the right time, which is a period of only five to 10 days near the end of July. If the cuttings are given proper treatment he has had them root within 21 days.

Plant Materials Round Table

The second round table concerned plant materials and was headed by Dr. John Creech. Other members were William D. Cole, Cole Nursery Co., Painesville, Ohio; Jack R. Siebenthaler, Siebenthaler Co., Dayton, Ohio, and Dr. Henry Skinner, United States National Arboretum, Washington, D. C.

Mr. Siebenthaler pointed out that the more variety of plant material we have available, the better chance we have in dealing with different shapes and sizes in our landscape efforts. We must learn not to go entirely on what the small plant looks like, but rather be able to anticipate what the mature effect is. Slides were shown to illustrate that the effectiveness of a planting should not last just over a short period, but rather over a long period of time.

Mr. Siebenthaler continued with comments on specific plants illustrated by color slides. Aesculus parviflora, he said, gave an excellent flower effect for a tree. Magnolia



★
Steel-framed panels — fiberboard fillers

★
Panels swing — like pages in a large book

★
Heavy, non-tipping steel base

★
Easy for your customers to examine.

Pedestal-type illustrated and wall and counter models available in several sizes and finishes. Get the full story on Multiplex sales-building display equipment.

You'll be CHARMED

when you discover the
MAGIC of MULTIPLEX

You receive plenty of colorful literature on blooming plants, decorative shrubs, etc. Why not put this attractive literature to work selling for you? You'll find the swinging wing-panels of a Multiplex Merchandiser an excellent display space for these full-color pamphlets, sheets and folders . . . and you'll find this display works as an effective, low-cost silent salesman — adding to your sales volume without increasing your sales costs.



PLAY SAFE

Mail coupon today



MULTIPLEX DISPLAY FIXTURE CO.

915-925 North 10th Street • St. Louis 1, Missouri

Please send your Display Equipment Catalog

NAME _____

COMPANY _____

ADDRESS _____

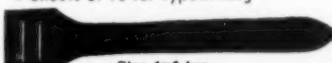
CITY AND STATE _____

F55

NURSERY TAGS

"Weather Resistant"

- Made of Water-resistant Paper Stock
- 9 Colors
- 7 Sizes and Styles
- Sheets of 10 for Typewriting



Size 1x6 in.

Prices per 1000—Tag Stock

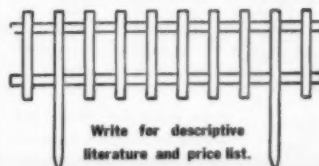
1000-4000.....	\$1.20	20,000.....	\$0.90
5000-9000.....	1.05	50,000.....	.85
10,000.....	1.00	100,000.....	.85

Write Today for Prices and Samples

PREMIER SOUTHERN TICKET CO., INC.
1621 Dana Ave. CINCINNATI 7, O.

PROPAGATION OF PLANTS, by Kains and McQuesten. Nursery and greenhouse reference. 687 p., \$4.50.
American Nurseryman Chicago 4.

Increase Your Sales and Profits By Selling Protection With Your Flowers and Shrubs

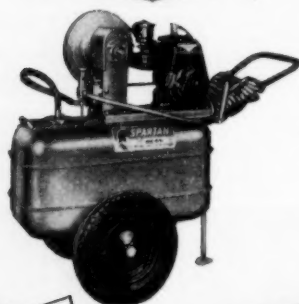


Write for descriptive literature and price list.

NORRIS FENCE CO.
LUFKIN, TEX.

Manufacturers of woven picket lawn and flower border fences, Cape Cod sectional fences, and shading fences.

fast, thorough
spraying made
easy!



any
spray
job

STOP DISEASE
KILL WEEDS • CONTROL INSECTS
SPRAY TREES • WHITEWASH
WITH

SPARTAN

POWER SPRAYERS

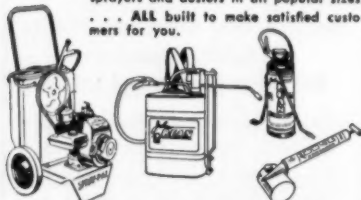
The New John Bean SPARTAN, with 25-gallon tank capacity, is the ideal power sprayer to simplify spraying chores for nursery and greenhouse men. The uniform 300-lb. pressure, delivered by the two-cylinder, plunger-type Spartan pump, gives you spray power to penetrate dense foliage, reach tree tops — put spray where you want it — fast! Far-reaching stream or gentle fog. Gasoline or electric power; 15 or 25-gal. capacities. Many useful attachments. Skid-mounted models available.

**a profitable, top quality
line to sell your customers**

SPARTAN — for estate and small farm owners.

SPRAY-PAL — the first power sprayer priced right for homeowners.

PLUS knapsack, tank-type and hand sprayers and dusters in all popular sizes. . . ALL built to make satisfied customers for you.



Write today for NEW 1955
Catalog of Garden Sprayers.



John BEAN

Div. of Food Machinery and Chemical Corp.
LANSING 4, MICH. • SAN JOSE, CALIF.

virginiana was a very dependable plant for use in contemporary landscaping. *Cotoneaster apiculata* was easy to maintain and gave good seasonal effect. *Hydrangea quercifolia* gave an excellent fall color. *Pyracantha* are especially good to espalier. Mahonias need a good method of propagation by cuttings. *Viburnum tomentosum* has beautiful red fruits and good flowers. *Viburnum burkwoodii* has one of the best blooms of any of the viburnums.

Dr. Creech gave a short discussion of the varieties of *pyracantha* and added comments concerning mahonia and holly.

Mr. Cole discussed several plants and illustrated them by use of slides. He stated that *Euonymus vegetus* was an upright type with several varieties now being on the market. *Rhamnus frangula*, columnar form, made a good narrow upright hedge and was easily propagated.

Dr. Skinner remarked that there was a good set of California quince at the National Arboretum at Washington, D. C., and the plants appeared vigorous, but have a habit of suckering and the fruits distract from the ornamental beauty. The arboretum is now looking for a non-fruiting variety. He added that cedar of Lebanon (*Sargent form*) stands very dry conditions, but is seldom grown. *Ilex cornuta rotunda* is a small mound-shaped plant which should be a leading plant in the future, since it withstands dry and hot conditions well. *Sophora japonica* is a beautiful tree, but hard to get started. *Magnolia acuminata* is a rapid-growing tree which does well in cities and is being used to replace the tulip trees that went down in the hurricanes in the Washington, D. C., area.

The next hour was spent in discussion of the answers to the many questions asked by the audience.

Soils Programs

Soils programs were the subject of a round-table discussion. Moderator of this session was Kenneth W. Reisch, Ohio State University. Other members were Donald J. Hillenmeyer, Hillenmeyer Nurseries, Lexington, Ky.; Frank Turner, Berryhill Nursery Co., Springfield, O., and Harry L. Cook.

Mr. Turner suggested that, in side-dressing a nursery crop, the fertilizer should be spread over the entire surface of the soil rather than applied only along the nursery rows. In this way he felt that the over-all fertility of the soil could be kept high, which would result in the nursery crop attaining salable size earlier.

W-W Compost Grinders and Soil Shredders have

Many Uses!



Here's the most versatile grinding equipment available. Powered by two Briggs & Stratton engines, the grinder and elevator separate for individual use. It shreds heavy sod or grinds roughest matter into the finest compost material or mulch and loads it at the same time. Also mixes and screens. Wheels on each section for easy portability. \$684.00 complete with engines, F. O. B. Wichita.



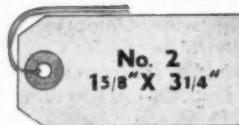
This popular portable model is gas or electric powered, with belt guard. \$178.00 complete with 2-h.p. Briggs & Stratton engine and belt guard. \$124.50 less motor and belt guard, F. O. B. Wichita.

All models make top dressing and potting soil without additional attachments.

Write for Literature on Complete Line

W-W GRINDER CORP.
DEPT. F WICHITA, KANSAS

TAGS FOR NURSERYMEN



BLANK IDENTIFICATION TAGS

Heavyweight tag stock. Per Thousand

	Manila	Colored
1,000	\$3.00	\$3.70
2,000	2.80	3.50
3,000	2.55	3.25
5,000	2.30	3.00
10,000	2.00	2.70

Colors: Yellow, Red, Blue, Green, Orange and White. Colors may be combined for quantity price. Minimum 1000 each color.

Wired Tags, add \$1.90 per 1000
Metal Eyeleted Tags, add 45c per 1000

Prices 10% higher west of Denver
Net 30 Days • F.O.B. Grand Rapids, Mich.

Free delivery for check with order.

Write for price list and samples of nursery tags

IMPERIAL TAG & PRINTING CO.

(Div. of Acme Time Card Co.)
312 Straight, S. W., GRAND RAPIDS 4, MICH.

Mr. Hillenmeyer emphasized that since the development of a root system of a plant depends largely upon the porosity of the soil, it is important to keep the organic content of the soil high.

More of the environmental factors can be controlled in canned plants, particularly the soil mixture and its fertility, according to Mr. Reisch. This, he felt, accounts for the better growth that can be obtained in canned plants as compared with field-grown plants. Mr. Turner pointed out that as long as all the essential nutrients are kept in proportional balance, there is more safety in applying high amounts of fertilizer for the purpose of pushing the growth of the crop.

Dependability of soil tests was discussed, with Mr. Cook reminding the group that most tests are but an indication of the relative amounts of nutrients that might be in the soil. They do not show the actual amounts.

In a discussion on cover crops, Mr. Hillenmeyer reported that K 31 fescue is ideal for use in establishing permanent sod as a cover crop. He recommended that on shallow soils it should be grown for three years and high amounts of nitrogen should be applied yearly.

When turning the cover crop under, Mr. Turner advised that it should be done at a time when the crop is still green. Instead of a permanent sod, he prefers to grow a cover crop that will produce a lush dense growth in one year, such as corn. The corn is sown with a grain drill in August. While still in a green state, it is disked down and plowed under. Nitrogen is applied immediately to aid in its decomposition. To serve as a winter cover, rye is sown after the corn is plowed under. In this way Mr. Turner feels that the corn can be grown one year and the nursery stock replaced the following year.

MICHIGAN GROUP BANQUET

The seventh annual banquet of the Saginaw Valley Nurserymen's Association was held recently at the Freeland Township hall, Freeland, Mich. A chicken dinner was enjoyed by members and guests, followed by the introduction of guests by President James Begick, Bay City.

Dick Somalski, chairman of the banquet arrangements, was assisted by Don Rice, Cass River Nurseries, Saginaw; Theodore Laetz, Laetz Hobby Farm, Bay City; Joe Korniski, and James Begick. Mrs. Virginia Rice was in charge of decorations, aided by Mrs. Thelma Laetz.

Get the BIG value!

—and give your business a boost!

Premier Peat Moss is *one* product that will help you in *many* ways!

- 1—It gives you superior soil conditioning that really pays.
- 2—It gives you better mulching, transplanting seedbeds and lining out.
- 3—It gives you a *big value* product you can sell and keep selling to every home gardener.

Premier makes all soils loose and friable—makes roots fine and fibrous—makes plants strong and full blooming—because it's the soil conditioner with *superior absorberency* that also supplies *natural, organic* material.

Display Premier now—in those colorful, eye-catching Premier packages—featuring the sensational Premier Kar Bale that is poly-laminated *inside and outside!* Send today for prices.

PREMIER PEAT MOSS CORP.
535 Fifth Ave. New York 17, N. Y.



PREMIER Peat Moss

The Natural Organic Soil Conditioner

PLANTS GROW BETTER
... **SELL BETTER**
IN PLASTIC POTS



No Breakage
Means Greater
Profits Too.

Write for
Cat. No. 301

UNION PRODUCTS, INC.
Leominster, Mass.

Please mention the **American Nurseryman** when writing advertisers

Want Your Own Radio Program?

Try "DOWN TO EARTH"—a radio program for nurserymen and garden shops everywhere.

Proved Successful Advertising

15-minute scripts compiled by a nurseryman and landscape designer; edited by a professional writer. Practical information for the back-yard gardener with appropriate advertising spots.

Write for complete information and sample script sheet. Only one contract in an area.

A. W. LANDSEADEL

3340 Secor Rd.
TOLEDO 6, O.

Ohio Short Course

Landscape Day Talks on Plant Topics

By John L. Rice

The program of landscape gardeners' day, January 18, at the Ohio short course this year was composed of five parts, with as many speakers.

Ornamental Plants for Shade

Victor H. Ries, of the department of horticulture and forestry at Ohio State University, discussed the use of those plants that will thrive under shady conditions. Mr. Ries reported that any shaded area can be made into an attractive spot, with an abundance of foliage and bloom, if the proper plant materials are used. So that those in attendance could better visualize the plants, slides were shown along with the talk.

Two of the evergreen ground covers discussed were a Romainian variety of *Hedera helix* which has the same excellent, but larger, foliage as the species, and *Vinca minor*, or the common periwinkle. Recommended as nonevergreen ground covers that do well in the shade are *Ajuga reptans*, *convallaria*, which is tough and can grow where other plants do not survive, and *teucrium*, which is not so hardy and may die out in a severe winter.

Blue-eyed Mary, or *collinsia torenia*, sweet alyssum, *calendula*, and aster are a few of the annuals that do well in shady locations. *Collinsia* does best in low, moist places. The seeds should be sown in late August or early September. It blooms at the same time as the tulip. In most cases annuals do not thrive in shade. Those mentioned should succeed when grown in partial shade.

A few of the perennial flowers mentioned that may be used in shady situations are *hepatica*, *Sanguinaria canadensis* (bloodroot), *mertensia* (Virginia bluebell), *cyripedium* (lady's-slipper) and Japanese anemone. *Hepatica* is a spring-blooming native plant that thrives in either acid or alkaline, moist soil. It needs some sun in the spring, but will tolerate shade in the summer. Bloodroot easily spreads and makes a good refined ground cover with excellent foliage. The Virginia bluebell is one of the loveliest of the early spring-blooming plants, which serves its best purpose when allowed to become naturalized in a shady place. Japanese anemone is difficult to establish; two good varieties are Septem-

ber Charm and September Spirit. The lady's-slipper is an attractive, wild flower which may be found growing natively in acid soil in a dimly lit woodland or a shaded ravine.

Bulbs to be used in shaded areas include any of the spring-flowering species. Some mentioned were the snowdrop (*galanthus*), crocus, grape hyacinth (*muscaria*), Siberian squill (*Scilla sibirica*), early double-flowering tulips and varieties of narcissus.

The majority of woody ornamental plants do not thrive in shaded conditions. Of those that will tolerate shade it must be realized that, in most cases, the deeper the shade, the poorer the flower and fruit of the plant. *Euonymus fortunei* is useful because of its dark green foliage. *Akebia quinata*, one of the oldest vines in cultivation in this country, may be used as a hardy vine or ground cover in a shady place. Many varieties of azaleas, viburnums and

magnolias, along with *Oxydendrum aboreum* (sourwood), with its excellent foliage and fall color, do well in the shade. All of the cotoneasters get along in places where there is not much sun.

Turf Grass Studies

Dr. Richard R. Davis, of the department of agronomy at Ohio agricultural experiment station, Wooster, reported on "Turf Grass Studies at the Ohio Experiment Station."

At present, according to Dr. Davis, there has not been enough turf research in Ohio. The experiment station is now engaged in conducting studies on lawn grasses in experimental plots at Wooster.

First discussed was an experiment which has been in progress for two and one-half years. Dr. Davis pointed out that nitrogen is the element most needed by the grasses. With this in mind, fertilizers with varying nitrogen concentrations were applied to

ADVERTISE Your BUSINESS



with finest-quality work garments and service uniforms EMBROIDERED to Advertise! Buy direct and SAVE!

Advertise WHO YOU ARE AND WHERE TO BUY WHAT YOU SELL. Have your ad embroidered on the work uniforms of your personnel. It's sure, steady advertising—and the cost is nominal. When you buy direct from manufacturer at factory prices, you get finest-quality garments for less than you pay for ordinary work clothes locally . . . and the embroidered lettering which makes sales and customers costs you

practically nothing! SAMPLE BROCHURE FREE! Get the complete, money-saving, sales-building story. Rush your letterhead today for our Brochure K which shows complete selection of styles, actual fabric samples and huge embroidery selection.

ELIN MFG. CO.

259 Fifth Ave.
ROCHESTER, IND.

Silk-Screened T-SHIRTS

For summer wear, nothing snaps up employee morale like light, breezy T-Shirts. And when they're ours, they not only look neat, but they're silk-screened to advertise your business as well. Ask for Brochure 10.



BOOKS FOR NURSERYMEN

Make your library complete! Select the books you need now from this list available for your handy reference. Keep up to date with the knowledge of experts to help increase your business. If you don't find the books you want here, let us know. Undoubtedly, we'll be able to help you in securing the exact information you want. Look this list over carefully and send your order now!

PROPAGATION

Propagation of Plants—Kains and McQuesten.....	\$ 4.50
How to Increase Plants—Hottes.....	3.00
Nursery Manual—Bailey.....	5.75
Improved Practices in Propagation by Seed—Chadwick.....	.25
Hormones and Horticulture—Avery and Jordan.....	6.00
Plant Breeding for Everyone—Beatty.....	2.75
Practical Plant Breeding—Lawrence.....	2.00
Propagation of Alpines—Hills.....	5.00
Propagation of Trees, Shrubs and Conifers—Sheat.....	5.00

MAINTENANCE

Maintenance of Shade and Ornamental Trees and Shrubs—Pirone.....	8.00
New Tree Experts' Manual—Fenske.....	5.00
The Grafters' Handbook—Garner.....	4.50
The Pruning Manual—Christopher.....	5.00
Sunset Pruning Book—Hudson.....	1.50

SOILS AND FERTILIZERS

The Nature and Properties of Soils—Lyon, Buckman and Brady.....	5.75
Our Garden Soils—Kellogg.....	4.00
Care and Feeding of Garden Plants—14 experts.....	3.00
Handbook of Fertilizers—Gustafson.....	2.50
Soils and Fertilizers for Greenhouse and Garden—Laurie and Kiplinger.....	2.50

INSECTS AND DISEASES

Diseases and Pests of Ornamental Plants—Dodge and Rickett.....	6.00
Plant Disease Handbook—Westcott.....	10.00
Garden Enemies—Westcott.....	3.50
Insect Guide—Swain.....	3.50
The Gardener's ABC of Pests and Diseases—Dimock.....	2.95

NURSERY OPERATION

Beginning in the Nursery Business—Pinney.....	.50
The Principles of Nursery Management—Duruz.....	3.50
Nursery Cost Finding—Surtees.....	7.50

LANDSCAPE AND DESIGN

Complete Home Landscape and Garden Guide—Korbobo.....	2.95
Small Home Landscape—McKenna.....	2.95
New Design of Small Properties—Bottomley.....	4.00
How to Beautify and Improve Your Home Ground—Aul.....	3.50
Landscaping Plans for Small Homes—Bailey.....	2.00
Landscape Sketching—Black.....	5.75
Planting Design—Robinson.....	3.00
How to Plant Your Home Ground—Aul.....	3.50
Landscaping Your Home—Sunset.....	1.00
Landscape with Shrubs and Flowering Trees—Lamson.....	3.50
65 Practical Garden Plans—Elliott.....	1.00
Trees and Shrubs for Landscape Effects—Coffin.....	4.95
How to Landscape Your Grounds—Johnson.....	3.50
Landscaping Master Units, Series 3—Surtees.....	3.00

CONSTRUCTION

Patio Book—Sunset.....	2.00
How to Build Walls - Walks - Patio Floors—Sunset.....	1.50
What to Make with Concrete—Popular Mechanics.....	2.00
Building Plant Shelters and Garden Work Centers—Sunset.....	1.00
How to Build Outdoor Furniture—Sunset.....	1.00
How to Build Garden Structures—Aul.....	3.50

HOUSE PLANTS

Modern Foliage Plants—Graf.....	.50
Geraniums—Clifford.....	1.00
Plants Indoors—Noble and Merkel.....	6.95
African Violets—Wilson.....	2.95

TREES AND SHRUBS

Shrubs and Vines for American Gardens—Wyman.....	\$ 7.50
How to Grow Fuchsias—Howard.....	1.50
Lilacs for America—Lilac Survey Committee.....	1.00
The Book of Shrubs—Hottes.....	4.00
Climbers and Ground Covers—Hottes.....	3.00
The Friendly Evergreens—Kumlien.....	10.00
Evergreens—Kumlien.....	1.50
Cultivated Conifers—Bailey.....	13.50
Hollies—Hume.....	6.75
Roses for Every Garden—Allen.....	3.95
Azaleas: Kinds and Culture—Hume.....	4.75
Winter Hardy Azaleas and Rhododendrons—Bowers.....	3.00
Trees for American Gardens—Wyman.....	7.50
The Book of Trees—Hottes.....	4.00
Trees—Zim and Martin.....	1.50
Book of Perennials—Hottes.....	2.75

GREENHOUSE OPERATION

Florist Crop Production and Marketing—Post.....	10.00
Greenhouses: Their Construction and Equipment—Wright.....	3.00
ABC of Orchid Growing—Watkins.....	3.00
Popular Orchid Growing—Sanders.....	1.75
Heating Greenhouses—Taft.....	.50
Seed and Potting Composts—Lawrence and Newell.....	1.75
Flowering Pot Plants—Potter.....	2.00
Greenhouse and Garden Chrysanthemums—Kiplinger.....	3.00

FLOWERS IN COLOR

The Flowering Cactus—Carlson.....	7.50
Camellias Illustrated—Sharp.....	5.00
Roses Illustrated—Sharp.....	3.50
Camellias—Gerbing.....	15.00
Garden Bulbs in Color—McFarland, Hatton and Foley.....	3.95
Garden Flowers in Color—Foley.....	2.95

MISCELLANEOUS

Plant Buyers Guide—Steffek.....	7.50
A Growers' Guide to Bedding Plants—Potter.....	1.00
Turf Management—Musser.....	7.00
The Portable Garden—Sunset.....	1.00
Manual of Cultivated Trees and Shrubs—Rehder.....	12.50
Profitable Direct Mail Methods—Stone.....	5.75

REFERENCE

Taylor's Encyclopedia of Gardening—Taylor.....	5.00
Horticultural Color Charts—Royal Horticultural Society.....	12.00
Hortus Second—Bailey.....	12.50
Standardized Plant Names—American Joint Committee on Horticultural Nomenclature.....	10.50
Pronouncing Dictionary of Plant Names.....	.25
Standard Cyclopaedia of Horticulture—Bailey.....	52.00

AMERICAN NURSERYMAN

343 So. Dearborn St., Chicago 4, Ill.

Please send, postpaid, the books which I have listed below. I am enclosing my remittance to cover the cost of these books.

NAME _____

ADDRESS _____

CITY _____

ZONE _____

STATE _____

Reduce costs for soil preparation and seeding

The GILL
does all this
for you
in one
operation!

Scarifys

Levels

Grades

Breaks Clods

Pulverizes

Rolls and Firms

Aerates

Seeds



with the remarkable GILL PULVERIZER and SEEDER

SAVES LABOR Your Gill will pay for itself in thirty days . . . does the work of from 7 to 12 men.

SAVES MONEY Your Gill does the work of many pieces of equipment, saves investment and eliminates changeover time.

SAVES SEED The Gill seeding control eliminates overlapping and overcovering, insures a better stand of grass with less seed.

SAVES MAINTENANCE Rugged, heavy-duty construction throughout, and the finest of steel cuts maintenance costs to the barest minimum.

IMPROVES Quality No tool or hand laborer can match the seedbed of a Gill . . . no ridges, furrows, humps or valleys.

Get the complete story on the exact Gill model for your needs . . .

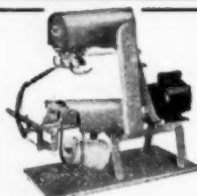
GILL OF CANADA - 60 Elgin St. N., Galt, Ontario, Canada

GILL MANUFACTURING CO.

2032 S. Tyron Street

Charlotte 3, North Carolina

LILACS FOR AMERICA, by Lilac Survey Committee. 30 species, 800 varieties. 48 p.
\$1.00 postpaid. American Nurseryman, 343 S. Dearborn St., Chicago 4, Ill.



FELINS BUNCH TYER

Automatically adjusts itself and ties any size bunch up to 19 lbs. in circumference. Ties roses, glads, seedlings.

as well as any other type nursery stock and cut flowers. Fast and efficient. Tying mechanism inverted so that dirt will not get into it, contributing to longer life.

FELINS TYING MACHINE CO.
3351 N. 35th St.
Milwaukee 16, Wis.

BURLAP...

DUTCH-DOMESTIC-ROTPROOF

MENEPOTS—TWINES—WILT-PRUF
PLANT LABELS —

HORMODIN POWDERS
GERMAN PRUNING SHEARS

and KNIVES
NEEDLES — EROSION NETTING

AMERICAN-DUTCH TRADING CO., INC.

"For The Nurseryman"

P. O. Box 177

CRANSTON 10, R. I.

different experimental Kentucky bluegrass plots. Ammonium sulphate was used as the inorganic source of nitrogen and milorganite as the organic source. The amounts put on varied from three pounds per 1,000 square feet per year (100 pounds per acre per year), down to no nitrogen at all. The time of year when the fertilizer was applied was also varied. On some plots applications were made in the spring, on some in the summer and on others in the fall.

One of the drawbacks, it was learned, is that the use of large amounts of nitrogen may lead to the development of a lot of quack grass. The plot having the highest nitrogen concentration (three pounds per 1,000 square feet per year) had the greatest amount of quack grass. Where the nitrogen was applied at the rate of three pounds per 1,000 square feet per year in the spring, there was much more quack grass present than when the same amount was applied in the fall. The least amount of quack grass was found in the plot with the least amount of added fertilizer. Thus far, the major conclusions concerning the development of quack grass drawn from this experiment are, that one should not use over two pounds per 1,000 square feet per year of nitrogenous fertilizer on bluegrass sod and that for best results this should be applied in the fall.

Numerous types of grasses are on trial at the Wooster station. Vegetative strains of creeping bent grass, such as Old Orchard, Congressional, Pennlu and Arlington, each have adaptation and performance limitations. Old Orchard forms a good summer turf and is used on golf greens and lawns. The use of bent grass, however, in most cases is not encouraged for lawn use because it requires a great deal of care.

The polycross strain known as Pencross, developed at the Pennsylvania agricultural experiment station, is a new seeded creeping bent grass. Designed to improve quality of turf produced by seed, it has no great advantage over the good vegetative strains.

Dr. Davis next covered some of the new grasses that can be used for lawns, fairways or general turf areas. Along with this part of the discussion, slides were shown.

Although slow in getting started, Merion bluegrass is superior to common bluegrass or any other type of Kentucky bluegrass now in use. When clipped to three-quarters inch, common bluegrass becomes sparse, against the good thick mat of Merion. Merion bluegrass also holds its

More Growers Choose UNION Plastic Pans for EXTRA Easter and Mother's Day Sales!

RED
WHITE
CORAL
GREEN
YELLOW
MOSS GREEN



JUST OUT!
AZALEA POTS
4" dia. x 3" deep
5" dia. x 4" deep
ORDER SAMPLES
RIGHT AWAY!

UNION PLASTIC PANS ARE MADE IN 6, 8 and 10-INCH DIAMETERS

Florists and growers everywhere are choosing these Union Plastic Pans for their Easter and Mother's Day plants. Naturally, there's a good reason... people like them - and they buy them more readily than they do plants in other types of pans.

If you're one who has yet to try Union Plastic Pans, check these features and order a supply now! They pack a terrific sales punch!

- Light weight - they actually weigh less than one-eighth as much as similar-size clay pans.
- No wrapping...no painting...no ribbon... your choice of six gay plastic colors.
- No sterilizing...no scrubbing...just a quick wipe with a damp cloth restores their good looks.
- Extra eye-appeal...extra sales appeal...and they're practically unbreakable!

Write for Circular showing complete line of Plastic Pots, Tubs and Pans in Standard and Utility Colors.

UNION PRODUCTS, INC., 511 Lancaster St., LEOMINSTER, MASS.

color better than common Kentucky bluegrass in the winter.

Merion bluegrass can take a large amount of nitrogen. One hundred pounds per acre of a nitrogenous fertilizer should be applied before sowing the seeds. Each year 60 pounds of this nitrogen source should be added in the spring and 100 pounds in the fall. This heavy rate of nitrogen added to the soil will give the Merion bluegrass a characteristically slow start.

Tall fescues are coarse grasses. They keep their green color well into the winter months. When cut to three-quarters inch they do not do so well as when left at two inches. A closely clipped lawn of Merion bluegrass and red fescue will look a little mottled where the fescue tends to die out.

Two other lawn or turf grasses are U-3 Bermuda grass and Meyer's Zoysia. The U-3 Bermuda strain has more tolerance to cold, greater density and better texture than common Bermuda grass. Meyer's Zoysia, although it becomes dormant and brown in the winter, is capable of standing colder conditions and has a finer texture than other strains.

Controlling crabgrass in bluegrass sod was discussed by Dr. Davis. Chemicals, he claimed, may tempo-

LEARN MODERN LANDSCAPING



EARN
HIGHER
PAY!

American Landscape School's thorough, easy-to-follow home-study method prepares you for a better job in 8 to 12 months.

Become a landscape specialist. Learn the newest, most modern methods and trends. Gain proficiency in contemporary landscape and garden design, drafting, mapping and field work. Improve your knowledge of horticulture, construction, superintendence, salesmanship, office practices.

45 generously illustrated lessons. Hundreds of new ideas. Prepared by Francis A. Robinson, landscape architect for residences, industrial buildings, universities, parks and cemeteries coast to coast.

FREE lifetime consultation service. 39th year. Successful graduates throughout the world. Mail coupon for complete information.

AMERICAN LANDSCAPE SCHOOL

Charter member,
National Home Study Council
6736 Grand Ave., Des Moines 12, Iowa
Please tell me how modern landscaping methods can increase my income.
Name.....
Address.....
City.....State.....

rarily eliminate crabgrass and thereby permit a lawn to get started, but the only real cure is a thick mat of grass. Applications of phenyl butyric acetate at five pints per acre in three treatments over the spring

BUSH BANDS-PLANT TRAYS PERENNIAL POTS and FLATS

Save Time • Save Labor • Save Money
• Last Longer • Avoid Waste • Get
Faster and Better Growth • Increase
Sales

THE MODERN, CLEAN AND
EASY WAY OF GROWING
AND MARKETING PLANTS
MORE PROFITABLY



Bush Plant Bands are lighter to handle. Easily opened - hold more soil.

Bush Plant Trays are easy to set up and fill. Splendid for retail sales.



YOU will save money with Bush Bands, Trays, Perennial Pots and Flats because they give you longer wear, better service and customer satisfaction. Made with our own specially treated, decay-resisting veneer. This treatment is a Bush exclusive special process. Write today for full information and prices.

Samples on Request—State Size

QUACKENBUSH INDUSTRIES, INC.
9245 Cherry St. FRANKLIN PARK, ILL.

POLYETHYLENE**for the
NURSERY
TRADE**Polyethylene
SheetsPolyethylene-
Kraft PaperPolyethylene
BagsNursery
TwinesPlain Kraft
Paper and
BagsTapes of all
Descriptions**POLYETHYLENE**Let us help with your
packing and shipping
problems.Write to us for samples
and prices.**HUBBS AND HOWE****1702 ELMWOOD AVE.****BUFFALO, N. Y.**

DEPT. N

Established in 1895

Offices in

BUFFALO, N. Y.

ERIE, PA.

ROCHESTER, N. Y.

NIAGARA FALLS, N. Y.

SYRACUSE, N. Y.

JAMESTOWN, N. Y.

may be used to eliminate crabgrass when it is in the small seedling stage. This will not have as much control if applied in August. When the crabgrass plants reach maturity in July and August, potassium cyanate, at the rate of eight pounds per acre, is a good control. Three applications will also be necessary here.

For information on improving lawn soils, seeding the lawn, care of lawns, mowing and control of lawn weeds and other pests, Dr. Davis suggested sending for extension bulletin 271, "Your Lawn," issued by Ohio State University and the Ohio agricultural experiment station.

Lighting Things Up

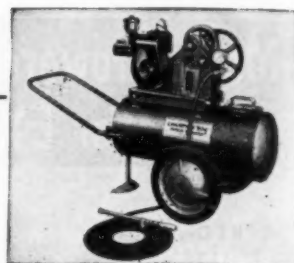
Charles Callura, of the supply division of the McClery & Carpenter Electric Co., Columbus, and his associates, Alan Lee, representative of Lightolier, and Miss Blanch Waggener, of the Columbus Southern Electric Co., disclosed many features and uses of outdoor landscape lighting.

Now, more than ever, millions of homeowners are taking greater pride in their homes. "Man wants his home to look like a castle." Night illumination of the landscape not only tends to increase the attractiveness of the home, but also can be functional in giving more time for outdoor leisure at night.

The view from the living room picture window is no longer a wall of blackness after dark, but, with outdoor lighting, can be made into a beautiful natural landscape scene. This balance of exterior with interior lighting will add spaciousness to the room and make one feel in closer contact with the beauties of nature outside.

By illumination of the desired features of the grounds and by leaving others in the dark, a place can look more impressive by night than in the day. Many arrangements of lighting combinations can be developed by the homeowner as he experiments in creating different lighting effects. The foliage and over-all outlines of shrubs and trees can produce outstanding landscape results.

With flood lighting from units concealed under the eaves, outstanding plant materials can be dramatized when they are at their seasonal best by moving a Lightolier "bullet" unit from place to place. A planting may thus be accented, while the entire garden is illuminated with a less intense light. Light-colored objects, such as gravel, concrete or a clump of white birch, are good reflectors of light and will stand out



**For EFFICIENT POWER . . .
for EVERY SPRAYING NEED
CHAMPION
Presents the New "600"
POWER SPRAYER**

Here's the new power sprayer for all-around use. Mounted on a sturdy chassis for easy mobility, it is powered by an electric motor for inside use, by a 1 1/2 H.P. air-cooled engine for outdoor use. An exclusive Champion feature of proved performance is the vertical single-cylinder pump. Its dome-shaped air chamber assures a steady pressure of up to 350 lbs., delivering 3 gallons per minute. The "600" is designed for accessibility, easy lubrication and maintenance. Write today for literature.

CHAMPION SPRAYER CO.
Mfrs. Portable Sprayers and Dusters
6507 HEINTZ AVE. • DETROIT 11, MICH.

**The
Original SWISS
ROTARY TILLERS**



**REPAIR
PARTS
AVAILABLE
FOR
ALL OLD
MODELS**

Best for
35 Years

Mfd. by **SIMAR** since 1918

NOTE: Prices Reduced on All Models

Write for Details

E. C. GEIGER CO.

P. O. Box 270

NORTH WALES, PENNSYLVANIA

U. S. A. Distributor

CHARLES SIZEMORE

319 1/2 Georgia St. Louisiana, Mo.

Collector of past-due notes and accounts any place in the United States and foreign countries—Rates as below:

18% on the first \$500.00.

15% on the next \$500.00.

10% on the excess of \$1,000.00.

Minimum fee \$15.00 except on claims under \$30.00 for which it is 50%.

SUIT FEES: On claims of \$45.00 or more, a suit fee of not less than \$7.50.

* **NO COLLECTION—NO CHARGE**

Freight bills not over two years old checked for 35 per cent of any amount found. Nothing found, no charge.

well in feature positions. A daylight effect can be created at night by complete flooding of the area. In the daytime it may be difficult to stress certain landscape features and tone down others. Light at night may subdue those not wanted and be used to bring out those features needed for the effect that is desired.

Miss Waggener showed a series of colored slides which gave an idea of the value of landscape lighting. By switching from artificial night illumination shots to natural daylight views of the same areas, the various effects created with night lighting could be seen. Some of the slides shown were night views, through a picture window, of a Chinese garden, of a modern half-moon pool, of a rock garden and many other scenes both with night lighting and by natural daylight.

Lights may be concealed under eaves, in tree trunks, rocks or under artificial lily pads, or may themselves be exposed and be a part of the landscape scene. Upright fixtures may be used for low or step plantings and low lights for low blooming plants. In one of the slides an illuminated Hawaiian swimming pool was shown where the source of light was a 400-watt bulb below the surface of the water at one end of the pool.

Various types of fixtures were displayed. It was pointed out that they were waterproof; weather-resistant; constructed of aluminum, with openings on the bottom that allow for ventilation, drainage and cleaning; have the light source shielded to eliminate glare, and that no tools are needed for their everyday use.

For four 150-watt lamps and six 60-watt lamps, enough for most homes, that are kept burning for two hours every night, the year's bill should come to about \$20. In most installations it is best to bury the wires underground, but in places where traffic is not a problem the insulated wires may be run across the ground. Units may be plugged into standard house outlets. The "add-a-unit" cord arrangement permits plugging one unit into another to form a continuous series of units and thereby eliminate long lengths of hazardous, unsightly wiring. With moderately priced fixtures, heavily insulated wires and waterproof bulbs, it is now practical to light up outdoor landscape around the modern home.

Landscape Design

In order to get a vivid picture of Prof. Robert S. Reich's ideas on contemporary landscape architecture, one must hear this man talk. Here it is not attempted to give a full

here's what a Massachusetts PEAT HUMUS company says:

*"the machine has more than
lived up to our expectations"*



"the machine has more than lived up to our expectations" is proof that a Royer Compost Mixer does the work it was designed to do. The Model NCR-S (illustrated) handles up to 16 cu. yds. of peat humus per hour, completely shredding, mixing and removing trash. Other models in capacities from 1 to 150 cu. yds. per hr.—electric motor, gasoline engine or belt-to-tractor driven. Send for Bulletin 46.

ROYER foundry & machine co. **ROYER**
182 PRINGLE ST., KINGSTON, PA.

"Pure Sphagnum" ORGANIC

Fafard PEAT MOSS

PROVEN SOIL CONDITIONER

HIGHLY ABSORBENT

MAKES SANDY SOIL MORE
COMPACT—LIGHTENS HEAVY CLAY
SOIL—CLEAN AND FREE FROM WEED-
SEEDS AND DISEASE SPORES

STIMULATES GROWTH
AVAILABLE IN BALES, BAGS, BOXES

PREVENTS LEACHING AND
WASTE—IMPROVES AERATING—EN-
COURAGES BENEFICIAL BACTERIA—
LASTS LONGER IN THE SOIL

WRITE, WIRE, CALL US TODAY, LONGMEADOW 7-3316

CONRAD FAFARD Inc., P. O. BOX 774(A) SPRINGFIELD, MASS.

The Perfect Line

For
Self-
Merchandising



Insecticides and Fungicides WEED KILLERS, HOUSEHOLD SPRAY

Colorful, Tell-All Labels

Invite Home Gardeners to Help Themselves

The Niagara line of packaged insecticides and fungicides is a "natural" for self-service stores. Every attractive label shows at a glance what the contents are for and clearly states how, when and where to use. Home gardeners can and will shop from the shelves. You'll make easy money just stocking and displaying the complete Niagara line. Normal store traffic will do the rest. Write for price list today.

Niagara CHEMICAL DIVISION

FOOD MACHINERY AND CHEMICAL CORPORATION

Dept. 17-B

Middleport, N. Y.



EVERGREENS, by L. L. Kumlien. How to select, plant and care for evergreens. 91 p., illus. \$1.50 postpaid. American Nurseryman, 343 S. Dearborn St., Chicago 4, Ill.

Actionized...for speedier more efficient SOIL SHREDDING!

ONLY LINDIG shredders pass all soil through exclusive patented shredding blades...guaranteed perfect shredding of all material...soil, compost, peat, sphagnum moss, etc. Screening Attachment removes rocks and other unwanted particles. From \$95.00.



✦ POSITIVE SHREDDING BLADES!

LINDIG MFG. CO., INC.

1875 W. County Road C—St. Paul 13, Minn.



account of his stimulating lecture, but to cover a few of the highlights in the following paragraphs. A newly published bulletin on contemporary landscaping, written by Professor Reich, may be acquired by writing to Louisiana State University, Baton Rouge, La.

Professor Reich teaches at Louisiana State University and is president of the Louisiana Association of Landscape Architects and Landscape Gardeners.

Contemporary landscaping is not a fad, not an attempt to throw out long accepted ideas just to be new, not an effort to keep up with the times, but rather is built upon the past. The contemporary landscaper thoroughly understands what has been done previously, but he does not necessarily follow along the same lines.

The contemporary approach should not give fixed results. Every client is a guinea pig. No two people are in the same situation and, as his ideas change, the individual's situation changes.

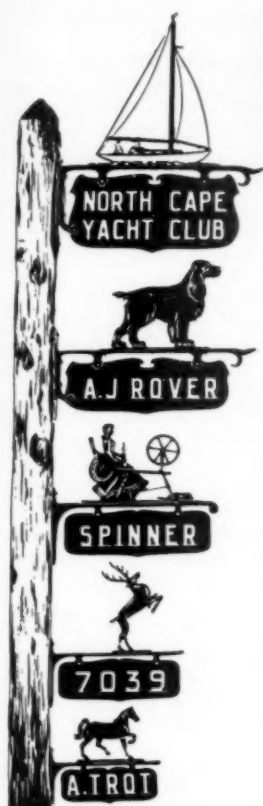
The measure of success in scientific research is definite, while that in art depends on the psychological effect on the people. The job of the landscape architect is to give people the greatest amount of satisfaction.

The most important considerations of contemporary landscape art are (1) people, (2) materials, (3) site and (4) space.

1. To landscape is to do something for and to people. The correct approach involves teaching, as people must be shown what good landscape design can be. After education, the person may not want many of the things he originally desired, but will have new ideas. We must, therefore, think of landscape design as something that continually grows.

2. The most important materials in contemporary landscape architecture are plants. If everything depended on plants, however, many immediately desired effects could not be created. Modern landscape design involves the use of more nonliving structures, such as fences and walks, than does conventional design. While this does not necessarily cut down on the number of plants used, these structures give interesting contrasts and immediate results. Another point concerning materials is that one cannot get unified effects in a garden if many varieties of plants are used.

3. Every site is different. All existing things on the site must be considered in relation to the landscape development. Natural features of the area, terrain and existing trees,



Get PLUS PROFITS with WHITEHALL Weather Vanes and House Signs

EVERYONE A PROSPECT

Impulse purchase—they have definite "eye-appeal"—popularly priced.

WHITEHALL Weather Vanes

Equipped with swivel base for quick and easy installation—adaptable for cupolas. Precision built of never-rust aluminum. Hundreds of artistic designs—variety of sizes.

- Master Craftsmanship
- Precision Built
- Never-rust Aluminum Construction
- Universal Swivel Base for quick installation.

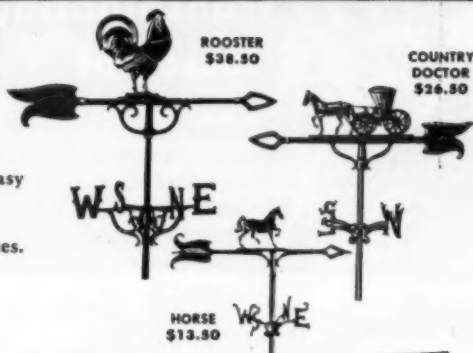
House Signs

For tree or post—lawn or wall—with reflecting numerals or name in Duo-Glo letters.

WALL SIGN
\$3.50

23085

TERRACE SIGN
\$4.50



SEND FOR LITERATURE TODAY!

See how you can cash in on the ever growing demand—especially for the popular ranch type homes sweeping the country. We will send you catalog with complete information regarding our FREE display stand, envelope stuffers, newspaper mats and other dealer helps.

WHITEHALL METAL STUDIOS, INC. • 5865 N. LINCOLN AVE. • CHICAGO 45, ILL.

should be used wherever possible in the landscape plan. Nature is the greatest source of landscaping inspiration. Ground, molded by nature, has a beauty not easy for the sculptor to create.

4. All landscape work is done in space, and everything we do affects space. On paper a job may look fine, but in actual practice it may not be good at all. The picture we are looking at from only one direction is in contrast with the actual life landscape which must be admired from all positions. Everything may look well when viewed from a given direction, but not when one is out in space, when all angles of vision are considered. In the garden a person looks all around, not along one definite axis.

Slides were shown which gave a glimpse of contemporary landscaped areas. Both property plans and actual landscape scenes were shown.

Dr. Reich concluded with this statement: "Landscaping should fit the practical needs of men along with his spiritual requirements."

Better Plants

The final session, in the evening, consisted of a talk given by Dr. John Creech, horticulturist at the United States plant introduction gardens, Glenn Dale, Md.

English Type RAIL and HURDLE FENCE



2, 3, 4 or 5 Rail.

Can be painted or allowed to age naturally without cost for upkeep. SCREEN TYPE PICKET FENCE shown in alternate issue.

PROFITS For Nurserymen! YOU SELL FENCE We Carry Inventory

ALL TYPES—From large Estates to Small Homesites.

FOR LONG LIFE—Entire Fence—(both posts and rails) treated with nationally known—PENTA PRESERVATIVE

WOOD PRODUCTS CO., Toledo, Ohio

Many new plant species, varieties and clones were covered by Dr. Creech in his illustrated lecture on "Better Plants for Landscape Design."

Several of the main points to look for in new plants are greater flowering range, better foliage types and flowers that bloom later in the spring.

Most of the broad-leaved evergreens are limited in range and the

extent to which they can be grown. The native habitat of most of these are coastal areas. In the case of broad-leaved evergreens, therefore, many are not hardy in inland areas.

Ilex cornuta is dense, unlike I. opaca, and will not exceed 10 feet in height. It will grow in either sun or shade. There are many clones on this plant, some of which have spiny leaves and others which are completely entire. The dwarf form, I.

You can prevent transplanting losses of

DECIDUOUS TREES AND SHRUBS
BROADLEAF EVERGREENS
CONIFERS, LINERS
HERBACEOUS PLANTS
PROPAGATING MATERIAL



with
NEW IMPROVED

WILT-PRUF

1 gal. concentrate	5 gals. concentrate	52 gals. concentrate
\$6.60	\$6.15	\$5.50
per gal.	per gal.	per gal.

Slightly higher in Canada and Mexico.

NURSERY SPECIALTY PRODUCTS, Inc.
CROTON FALLS, NEW YORK

WHEN sprayed on foliage, WILT-PRUF retards evaporation of water. This enables nurserymen and propagators to carry on planting operations without wilt or setback . . . virtually all through the year. Nearly all sizes and varieties of plant material have been moved successfully with WILT-PRUF. Discover how WILT-PRUF can help boost your nursery profits by ending slack periods, reducing plant loss and cutting replacement expenses. Buy it now from your nearest supplier.

cornuta Macopenny, is entirely sterile.

Ilex crenata buxifolia is a good ornamental form of the species which is used a great deal in tubs on patios. It is one of the leading plants in Japan. A dense plant, it will reach a height of 10 feet. I. crenata microphylla is the hardiest form of the species, having very small leaves. I. pedunculosa is very hardy and has entire leaves.

Rhododendron reticulatum is a deciduous plant which flowers about the same time as forsythia. R. schlippenbachii is the most widely known and used species. In Korea it may get up to 50 feet. Some of the other azaleas mentioned were Rhododendron alabamense, R. atlanticum, R. canadense, R. mucronatum and R. vaseyi. An interesting point is that before 1936 in Washington, D. C., few azaleas were grown. Many of these plants now grow in this area.

Pistacia chinensis, the Chinese pistache, is grown by the Chinese as a street tree. It has a beautiful red and orange autumn color. In Florida this species does well as a shade tree.

Interesting plants used for hedges are Euonymus alatus compacta, Berberis julianae, B. mentorensis and Ligustrum quihoui. Juniperus chinensis columnaris makes a good, tall, 20-foot hedge, if allowed to grow.

ELECT AT VANCOUVER

Harley Mays, Vancouver, Wash., was re-elected to his third term as president of the Southwest Washington Nurserymen's Association at its midwinter meeting, January 7, at the Mays home. Mrs. Ruth James, Battle Ground, was elected secretary-treasurer. The association includes nurserymen of Clark and Cowlitz counties.

NEW ARBORIST OFFICERS

New officers of the California Arborists Association were installed at the group's annual banquet, January 28, at Rickey's, Palo Alto, Calif. The officers are: President, John Davis; vice-president, Irwin Johnson, and secretary-treasurer, Philip Parsons.

Max Leonard, San Mateo county commissioner of agriculture, was the master of ceremonies, as for the past few years. The association meets regularly on the second Wednesday of the month at his office, at Redwood City. A good attendance is hoped for at the next meeting.

HAND TRUCKS

Especially built for handling B&B nursery material. Are built in three sizes, with capacity up to 1500 lbs.

Illustrated is our small model truck. One man can easily handle 600-lb. ball.



Write for folder giving details and prices.

THE GARDEN SHOP, Inc.

6315 West 75th St.

Overland Park, Kansas

Phone HEdrick 3288 (Kansas City, Mo., exchange)

ROOTSPRED TREE PLANTER

Fits Ford, Ferguson, International Super C, Case, etc.
Standard—For hilly, stony land, heavy sods.
Lake States—Has middlebuster between coulters and trencher for scalping.
M-4—Equipped with 28-in. coulters for planting in brush, roots, etc.

Write for literature.
ROOTSPRED ST. PETERSBURG, PA.

BURLAP SHEETS AND SQUARES

cut and sewn to your specifications. Quotations and samples on request.

STERLING BAG & BURLAP CO.

41 Carolina St. BUFFALO 1, N. Y.
Phone: CL 2339

OHIO SHORT COURSE FOR ARBORISTS

[Continued from page 10]

cide is applied with a boom and at pressure of 30 to 40 pounds per square inch. On the harder-to-kill weeds, however, it is important that the entire leaf surface be covered with the herbicide. This is accomplished best by applying the herbicide as a fine mist with a hand gun, using a pressure of 100 pounds per square inch. When this is done, the concentration of the spray solution is reduced by one third so that the same amount will be applied as with the boom. The cost of application when using a hand gun will average about three times more than when a boom is used.

Esters of 2,4-D Preferred

While ester forms of 2,4-D are more hazardous to use because of vapor drift, Mr. Easterday recommended their preferential use because of their greater effectiveness. For controlling the difficult-to-kill weeds, he combines one quart of the low volatile ester form of 2,4-D with 25 gallons of water and applies it with a hand gun.

When applying a nonselective herbicide, the results wanted by the client must determine the type of herbicide to use. CMU herbicide is ideal for keeping a firebreak free of vegetation. For maintaining a fence row free of weeds, a 2,4-D—2,4,5-T brush killer is satisfactory. Excellent grass suppression can be had by using a mixture of 2,4-D and TCA. This control measure has been found less costly yet just as effective as where CMU has been used. In all cases, Mr. Easterday reported that it is more costly to apply a nonselective herbicide than a selective one, although in each case the small hydraulic sprayer is most suitable for the arborist.

Chemical Brush Control Popular

Mr. Jacobs opened his address with a brief description of the 3-day chemical brush control course that was conducted last May for the foremen of his company. From the commercial viewpoint, the speaker was optimistic that the field of chemical brush control is large and "in spite of its growing pains, it has an attractive future." "It is popular," he stated, "because there just isn't enough hand labor to do the work of maintaining clean right-of-ways needed by public utilities, pipelines and many others." Where, at one time these right-of-ways were maintained manually and mechanically,

SELL *Lawn Beauty*

**Best for Your Customers' Lawns!
Most Profitable for YOU!**



FORCE FEEDS—that's where it's different from ordinary spreaders. Not dipped galvanized.

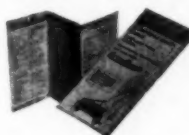
Patented. Other patents pending and applied for.



Only **LAWN BEAUTY** has these 4 exclusive patented features—1. Control Handle; 2. Rate Control Dial; 3. Cam Action Agitator; 4. Automatic Removable Shutter.

Spreads all materials—chemical fertilizers, organic fertilizers, seeds, plant foods, etc.—at the exact rate required. Sell the best in '55—Sell **LAWN BEAUTY**.

Available in 18-in., 24-in. and 36-in. widths. 18-in. hopper holds 50 lbs. of fertilizer. 24-in. hopper has a capacity of 70 lbs. Standard 36-in. holds 100 lbs. of fertilizer. Also available in 36-in. professional with hopper capacity of 150 lbs. 36-in. models have stainless steel hopper bottoms and shutters.



APPLICATION GUIDE FURNISHED WITH EACH SPREADER

55 brand name fertilizers, 10 non-brand materials and fertilizers plus seed mixtures have been factory-calibrated with **LAWN BEAUTY** and can be spread exactly as recommended by the manufacturer.

Manufacturers Are Invited to Send in Samples of Fertilizers for Calibration.

Lawn Beauty

A Product of
SCHNEIDER METAL MFG. CO.
1801 S. 55th Ave., Dept. 25.
CHICAGO 50, ILL.

Please send more information about **LAWN BEAUTY** spreaders

Name.....

Address.....

City..... Zone... State.....

My Jobber.....

TREES FOR AMERICAN GARDENS, by Donald Wyman. 745 recommended trees, 1600 species and varieties. **\$7.50.** American Nurseryman, Chicago 4, Ill.



**FINEST QUALITY — PROMPT SERVICE
LABELS PRINTED TO ORDER**

Write for samples, prices and discounts.
THE BENJAMIN CHASE CO.
DERRY VILLAGE, N. H.

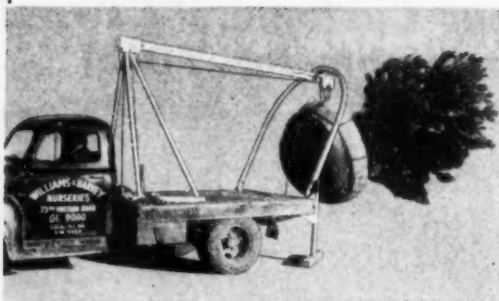
BORERS ???

Don't feed them — use
**Crystal's BORER
REPELLENT**

Dogwood and many other ornamental trees should be protected from borer damage. Nonpoisonous. Simply brush it on as directed.
30-gal. drum...\$36.00 5-gal. drum...\$7.00
All prices F.O.B. Philadelphia, Pa.

CRYSTAL SOAP & CHEM. CO., Inc.
6300 State Road, Philadelphia 35, Pa., Dept. AN.

NEW TREE MOVER



**Williams &
Harvey Nurseries
ANNOUNCE
This New,
Improved
Big Tree
Mover**

- New Lighter Weight
- Simpler to Operate
- Two Sizes, 6 Ft. and 7 Ft.
- Quickly Demountable
- New Lower Costs

This perfected new tree mover fits any standard truck. Ready now.

For specifications write at once.

Six-foot mover (as pictured) complete with power winch and all needed pickup parts, **\$1,575.00** F.O.B. Kansas City, Mo.



WILLIAMS & HARVEY NURSERIES

P. O. Box 8822

Kansas City, Mo.

NURSEYMEN and GROWERS

FOR EASIER PLANTING OF WIDE-HEAVIER

TREES AND SHRUBS

USE ROPER'S "SUPER"
POST-HOLE DIGGER with
18" to 24" AUGER

Wide, deep holes necessary to the growth and root penetration of trees and shrubs whether in rough, stony soil, in uneven ground or on hillsides is routine for Roper Post Hole Diggers.

**4-WAY ADJUSTMENT
FOR ANGLE DIGGING**

Four-way adjustment eliminates crooked holes. Triple bearings prevent a bent or broken main shaft. Double cutting edges on flight of auger lifts dirt faster and easier leaving cleaner planting holes.

**SHEAR PIN
REPLACEABLE
ABOVEGROUND**

ONLY
ROPER
OFFERS
PATENTED
FEATURES

Unit Guaranteed
1 Year;
Gears Guaranteed
10 Years.

ROPER
POST HOLE DIGGERS

MANUFACTURING CO. - ZANESVILLE, OHIO

DEALERS — DISTRIBUTORS — INQUIRE ABOUT OPEN TERRITORY

**GREENHOUSE AND NURSERY
SUPPLIES**

AMERICAN FLORIST SUPPLY CO.

1335 W. Randolph St.

CHICAGO 7, ILL.

BALED SHINGLE TOW

(CEDAR SHAVINGS)

WM. A. JOHNSTON

1522 N. W. Thurman St. PORTLAND 9, ORE.

they are now maintained chemically and much more effectively, too.

Oil-borne sprays and water-borne sprays were two methods cited by Mr. Jacobs by which brush may be controlled chemically. The oil-borne sprays are applied any time of the year to the basal parts of the woody plants. Water-borne sprays are usually applied during the growing season of the plant, preferably from the time the leaves are fully grown to the time of the first frost or foliage coloration in the fall. This constitutes a rather short period of the year; however, it continues to be the most popular method of brush control. This possibly is unfortunate for the arborist, since such a peak work season for chemical brush control coincides with that peak season for tree work.

Mr. Jacobs related that experience had taught the personnel of his company that a herbicide sprayer can never be safely used for insecticide spraying. In an experiment it was found that an application of one part of 2,4-D in 60,000,000 parts of water caused distortion of the leaves of some plant species. As a precautionary measure, his company has placed purple paint strips on sprayers, hose, guns and other equipment to distinguish them from other sprayer equipment. Even rope that is used in herbicidal work is kept separate from the rope that is used in regular tree work.

Practices by some contractors of chemical brush control work have resulted in undesirable public relations, and at times even the utility companies have been soured on the real value of chemical brush control. Mr. Jacobs listed some of these poor practices as bidding a job so cheaply that the men had to spray too rapidly and carelessly, unsightly roadsides of dead brush, and the improper manner of settling with property owners after real damage has occurred to valuable crops or livestock. "It is good practice," he stated, "to figure in the operating cost some money to settle such claims."

Wear on the equipment is about twice as great where it is used on right-of-way work as where used only in tree care work. This, too, must be considered in the operating cost, but he concluded, "Come on in, the water may not be fine and warm, but at least it's there."

Chemical Compatibilities Analyzed

Dr. Ralph B. Neiswander, department of entomology, Ohio agricultural experiment station, Wooster, in his talk on "Compatibilities and Stability of Insecticides and Fungi-


You Make More Money



CRAG Herbicide-1 is a product of

CARBIDE AND CARBON CHEMICALS COMPANY

A Division of Union Carbide and Carbon Corporation

30 East 42nd Street  New York 17, N. Y.

"Crag" is a registered trade-mark of Union Carbide and Carbon Corporation.

when you

Kill Weed Seeds

as they sprout

with

CRAG

Trade-Mark

HERBICIDE-1

With CRAG Herbicide-1 you gain two ways—you cut hand weeding costs and you make more money on better nursery stock. Weeds never get a chance to be troublesome when they're killed as they sprout.

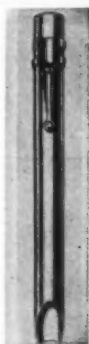
CRAG Herbicide-1 prevents weeds in the planted rows as well as between rows. You don't have to worry about drift hazard when you use CRAG Herbicide-1—it cannot hurt the leaves of your plants.

You too can profit more by getting CRAG Herbicide-1 at your dealer today.

cides," discussed the compatibilities of the newer pesticides with the older ones and advised about the safety and value of using spray solutions that had been mixed the previous day. Dr. Neiswander observed that the entire principles of pest control have been altered by the introduction of so many synthetic chemicals since World War II that by now there is almost a specific control measure for each pest. Today there are over 2500 trademarks for names of insecticides, but these include duplications of the same insecticide, such as DDT, which is listed under at least 150 different trademark names.

"While not compatible with sulphur, oil sprays may still be the most effective for controlling scale insects," stated Dr. Neiswander. Tolerance of the plants to oils is dependent upon the amount of refinement the oil has had. Dormant oils are not so highly refined as are the summer oils, and since they are not compatible with sulphur one of the dithio carbamates, such as ferbam, should be used when a fungicide is to be applied also.

The dinitro compounds, DN 289 and Elgetol 318, which are specific for eggs of aphids and mites, should always be used alone and only when



POCKET MICROSCOPE IS A DEEP SEEING EYE

Makes common things, like sugar, salt or sand, look like sparkling gems, while tiny insects appear as story book dragons. CAN YOU ask for more?

You can add greatly to your pleasure, profit and knowledge by the use of this precision microscope.

ASK FOR

DESCRIPTIVE CIRCULAR.

A FINE GIFT FOR A FRIEND

20 power, \$3.50 (3 for \$9.00)

40 power, 4.50 (3 for 12.00)

One of each, \$7.50

Postpaid. No C.O.D. Please.

Money-back guarantee.

JAMES A. VAN KLEECK

Horticultural Consultant

1242 Webb Rd. CLEVELAND 7, Ohio

SPRINKLER IRRIGATION SYSTEMS

New and Used

Also new weed-insect sprayers and transplanters.

ERIC FRANKE

R. 5 STURGEON BAY, WIS.

the plants are dormant. Lead arsenate is still considered a valuable insecticide for controlling chewing insects, since it is harmless to the parasitic insects. Burning of the foliage may result unless hydrated lime is mixed with the spray solution, although this addition does reduce the effectiveness of the insecticide.

Dr. Neiswander reported that DDT, BHC and chlordane were the most common of the chlorinated hydrocarbons, and thousands of

Cut hoeing costs
Kill your weeds
Make more money

Get CRAG HERBICIDE-1

Distributed By

FLORIDA AGRICULTURAL SUPPLY COMPANY



DIVISION OF WILSON & TOOMER FERTILIZER CO.
JACKSONVILLE, FLORIDA

IT COSTS NO MORE
(and in most instances less)
FOR OUR PACKING OF
Nursery Burlap
Squares and Rolls

Write for prices and samples

L. ATKIN'S SONS

P. O. Box 167 Rochester, N. Y.

Save Time and Money...

SAVES TIME . . . The new Snyder lift-type transplanter can be attached to any tractor that is equipped with a three point hydraulic or mechanical lift.

FLEXIBLE . . . The general Nursery Transplanter can be used to plant:

NURSERY STOCK: Evergreens, hardwood and softwood cuttings, shrubbery, bulbs, flowers, liningout stock and potted plants up to 3½" in diameter.

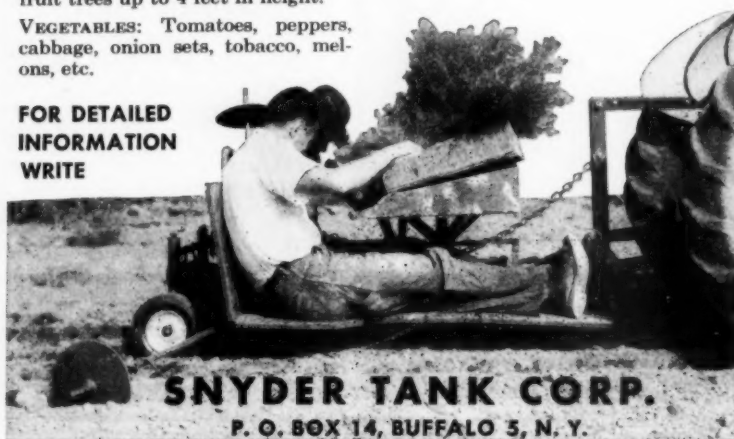
FRUITS: Strawberries, raspberries, currants, grapes and all types of fruit trees up to 4 feet in height.

VEGETABLES: Tomatoes, peppers, cabbage, onion sets, tobacco, melons, etc.

VERSATILE . . . The new transplanter is also available with water and liquid fertilizer injection systems; dry fertilizer distributors, front soil mulcher and plant spacer.

EASILY ADJUSTED . . . There are twelve adjustments that can be made to adapt the transplanter to varied soil conditions. Independent packer wheel assemblies insure constant packing and Plasti-Koted wheels permit planting in extremely damp soil.

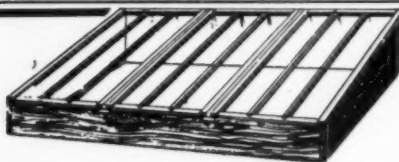
**FOR DETAILED
INFORMATION
WRITE**



SNYDER TANK CORP.

P. O. BOX 14, BUFFALO 5, N. Y.

ELECTRIC HOTBEDS



These Redicut Hotbeds are made of No. 1 Pecky Cypress full 1 in. thick. The back is 18 ins. high; the front is 12 ins. high; the ends slope (see drawing above). Easy to install. The sash will slide down or up for ventilation.

Made in the following sizes:

	Complete with Glazed Sash and Rafters	Add for Automatic Electric Heating Unit
3 x 4 feet.....	\$15.00	\$17.56
6 x 4 feet.....	25.00	22.28
9 x 4 feet.....	36.00	22.28
12 x 4 feet.....	44.00	29.74
15 x 4 feet.....	55.50	29.74
6 x 6 feet.....	33.10	22.28
9 x 6 feet.....	47.90	29.74
12 x 6 feet.....	60.45	34.46
15 x 6 feet.....	75.25	38.82
18 x 6 feet.....	87.60	58.82

Now you can grow plants all winter and root cuttings fast for a few cents a day with thermostatically controlled, invigorating, uniform heat so necessary for optimum growth. Lead-covered cable and automatic thermostat by General Electric. Satisfaction guaranteed. Heating units can be purchased separate for your present hotbeds. You will be amazed with results. Catalog No. 155 gives detail information.

YOH & HOOKER GREENHOUSE CO.
YOUNGSTOWN, O.

A. M. LEONARD & SON
PIQUA, OHIO
Knives - Shears - Pruning Tools
Nursery Spades-Grafting Supplies
WRITE FOR CATALOG

BRODLEAF Holland Peat Moss
BOSKOOP Burlap Squares
BOSKOOP Brand Reed Mats
HALF MOON MFG. & TRADING CO., INC.
90 West St. NEW YORK 6, N. Y.
Telephone: Barclay 7-8357

other synthetic organic insecticides have been developed from these. None of them are compatible with hydrated lime except the derivatives of chlordane; namely: aldrin, dieldrin and endrin, which are quite stable even in the alkaline materials such as hydrated lime.

Research work in Germany before World War II led to the development of the deadly organic phosphate insecticides, including HETP, TEPP and parathion. These materials deteriorate rapidly in water and so should be used immediately upon mixing. They are compatible with both sulphur and the dithio carbamate fungicides.

Malathion Popular Insecticide

According to a publication by the United States food and drug administration, malathion, an organic phosphate closely related to parathion, is less poisonous to man than either DDT or lead arsenate. Its use as a horticultural insecticide is gaining in popularity since many insects are susceptible to it. Residual toxicity is of short duration, comparable to parathion. It does not appear to be compatible with ferbam in the dust form.

Nicotine sulphate breaks down quickly when added to water and so should be used immediately upon mixing. Ovotran, aramite and dimite are specific acaricides and have little effectiveness in controlling insects. Neither ovotran nor aramite are compatible with hydrated lime, and aramite is not compatible with the organic mercurials or fixed copper fungicides. Dimite is expensive, but is compatible with everything. Likewise, captan is not compatible with oils or alkaline materials.

Detergents should be used in the place of soaps as a spreader, since the latter materials are alkaline in nature.

Dr. Neiswander handed out a compatibility chart, on which was indicated the compatibilities of many of the pesticides.

At the conclusion of the address, Dr. Neiswander answered questions that were asked from the group. To control box elder bugs, four pounds of 50 per cent chlordane wettable powder in 100 gallons of water should be sprayed on the outside areas where they congregate. Inside the house, they can be controlled by spraying with a household bomb at three times the normal concentration.

Scale insects may be controlled with a combination of one pound each of the actual ingredients of DDT and malathion in 100 gallons

HERE IS WHY NURSERYMEN PREFER MENNEPOTS



Superior Strength

Sturdily constructed, the MENNEPOT withstands hard handling without fear of breaking apart.

Stapled Bottom

Comes completely assembled . . . Potting can start immediately upon arrival—regardless of weather.

Light Weight

The MENNEPOT is easy to handle, economical to use. The extremely light weight makes shipping costs negligible.

Drainage

The unique side-drainage feature in the MENNEPOT makes waterlogging impossible while standing in the salesyard.

Size 0

Top . . . 4 ins.
Bottom . . . 3 1/2 ins.
High . . . 4 ins.
Weight per 100
Regular 10 lbs., Heavy 25
Regular Weight Price
100 . \$2.75 1000 . \$25.00
Heavy Weight Price
100 . \$3.75 1000 . \$35.00

Size 1

Top . . . 6 ins.
Bottom . . . 5 ins.
High . . . 6 ins.
Weight per 100
Regular 15 lbs., Heavy 35
Regular Weight Price
100 . \$4.00 1000 . \$37.50
Heavy Weight Price
100 . \$5.25 1000 . \$50.00

Size 2

Top . . . 7 ins.
Bottom . . . 5 1/2 ins.
High . . . 9 ins.
Weight per 100
Regular 24 lbs., Heavy 55
Regular Weight Price
100 . \$4.50 1000 . \$42.50
Heavy Weight Price
100 . \$5.75 1000 . \$55.00

Size 3

Top . . . 8 1/2 ins.
Bottom . . . 6 1/2 ins.
High . . . 9 ins.
Weight per 100
Regular 30 lbs., Heavy 70
Regular Weight Price
100 . \$5.00 1000 . \$47.50
Heavy Weight Price
100 . \$6.25 1000 . \$60.00

Size 4

Top . . . 8 1/2 ins.
Bottom . . . 7 1/2 ins.
High . . . 5 ins.
Weight per 100
Regular 30 lbs., Heavy 70
Regular Weight Price
100 . \$5.00 1000 . \$47.50
Heavy Weight Price
100 . \$6.25 1000 . \$60.00

Size 5

Top . . . 12 ins.
Bottom . . . 10 ins.
High . . . 12 ins.
Weight per 100 250 lbs.
20 . \$30.00 100 . \$27.50
500 . \$125.00 1000 . \$225.00
*Special for extra-heavy trees and large shrubs.

500 of a size takes 1000 rate in sizes 0-1-2-3-4. Regular-weight pots packed 100 and 200 per carton in sizes 1-2-3-4. Size 0, 250 only. Heavy pots are packed 250 per carton in size 0; 100 per carton in size 1; 50 per carton in sizes 2, 3 and 4 and 20 per carton in size 5. NO BROKEN CARTONS.

SEND \$1.00
FOR COMPLETE SET OF 11 SAMPLES.

Distributors

NEW YORK

Jackson & Perkins Co., Newark, N. Y.
Gar-Prod., Inc., Queens Ave., Lindenhurst (Long Island), N. Y.

OHIO

Skoll Distributing Co., 560 E. 99th St., Cleveland, O.
L. G. Harmon & Son, 1800 19th St., Canton 4, O.

PENNSYLVANIA

E. C. Geiger, North Wales, Pa.

NEW JERSEY

New Jersey Farm Supply, 449 Market St., East Paterson, N. J.

MICHIGAN

William Bell, 4002 Montgomery Ave., Detroit, Mich.

RHODE ISLAND

American-Dutch Trading Co., Inc., P. O. Box 177, Cranston 10, R. I.

CANADA

The Sheridan Nurseries, Ltd., Sheridan, Ontario, Canada.

MENNO S. MENNES NURSERIES

NORTH TONAWANDA, N. Y.

Phone LUDlow 4444

of water. Spray at a time when the scale insects are hatching. Since magnolia scale hatches during a period of several weeks, this insect is controlled most satisfactorily when sprayed early in the spring with parathion.

Dr. Neiswander reported that there still is no definite control for thrips in rose blooms because of the nature of these insects to migrate to the roses from nearby plants.

Wetwood Disease Described

The afternoon program was opened with the introduction of Dr. J. C. Carter, head of the section of applied botany and plant pathology, state natural history survey division, Urbana, Ill., who addressed the group on wetwood tree disease.

Dr. Carter stated that this disease is not at all a new one and, while commonly associated with elms, it is also prevalent in poplar, willow and oak trees. Symptoms of the disease appear as water-logged areas in the heartwood and older portions of the sapwood. This is caused by sap accumulating mostly in the spring growth tissue of the wood, composed of the larger xylem cells. In this sap accumulation live certain bacteria that are the causal agent, or pathogens, of the wetwood disease. It is still not understood just why such abnormal sap accumulations should occur within a tree.

As these bacteria digest the sugars

LIFETIME PLASTIC MARKERS

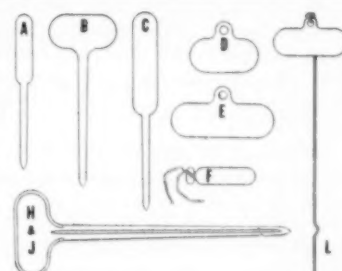
● Acclaimed by leading hybridizers, nurserymen and home growers of Roses, Iris, Chrysanthemums, house plants, shrubs, trees, etc. Ideal for conservatories, arboretums and botanical gardens. Made of durable, heavy gauge, molded white plastic. Guaranteed to withstand all kinds of weather. Write on them with pencil, will not come off. Yet can be cleaned and re-used (a little scouring powder on a damp cloth).

SAMPLE ASSORTMENT
55 MARKERS—INCLUDES 10 EACH OF A, B, C, D, F and 5 OF H—\$1.00.

Per 100
A. 4 1/2-in. vertical pot or border stake . . . \$1.25
B. 2x5-in. horizontal pot or border stake . . . 2.50
C. 6-in. vertical pot or border stake . . . 2.00
*D. 2-in. horizontal tie-on tag . . . 1.65
E. 3-in. horizontal tie-on tag . . . 2.00
F. 1/2x2-in. notched tie-on tag . . . 1.25

Write for other quantity prices—*D tags available in red, yellow, blue, green or white.

MARKERS AVAILABLE IN CANADA FROM C. A. CRUICKSHANK, TORONTO 12, ONT.



Per 100
H. 2 1/2x8-in. tee stake . . . \$5.00
J. 3x12-in. tee stake . . . 9.00
L. 18-in. galvanized stake for D and E . . . 7.00
● Postpaid in U.S. and Possessions ● No C.O.D.'s Please.



ELECTRIC SEED BED HEATERS

FINEST SOIL HEATING CABLE AVAILABLE
MANUFACTURED IN CAPACITIES AND LENGTHS TO MEET ALL STARTING AND GROWING REQUIREMENTS

Guaranteed first class material and workmanship. All sales refunded in full if returned within ten days.

STANDARD 5 WATT, 115 VOLT UNITS FOR USE IN DAMP SOIL OR WATER ONLY.

J40, Cable Only—200 Watt—40 ft. long (20 sq. ft. area) . . . \$2.25
S80, Cable Only—400 Watt—80 ft. long (40 sq. ft. area) . . . 4.50
J40A, (Single Sash, 20 sq. ft.) with AT thermostat . . . 6.75
S80A, (Double Sash, 40 sq. ft.) with AT thermostat . . . 9.00
S160, Cable Only—230 volts, 800 Watts, 80 sq. ft. . . 9.00

2 1/2 WATT PER FT. CABLE FOR USE IN AIR, SAND, OR OTHER SPECIAL ROOTING MEDIUMS. (Sq. ft. areas based on 10 watts per sq. ft.)

Model	Watts	Sq. Ft. Heating Area	Price
A6	15	1.5	\$1.00
B12	30	3	1.80
M26	60	6	2.80
P40	100	9	2.80
J56	140	14	3.00
S112	280	28	6.00

FOR USE IN ANY TYPE GROWING MEDIUM SPECIAL HEAVY DUTY COMMERCIAL CABLES

S80S, 115 volts—400 watts—80 ft. long (40 sq. ft. area) . . . \$6.00
S160S, 230 volts—800 watts—160 ft. long (80 sq. ft. area) . . . 12.00

FOR USE WITH ALL CABLES

AT air thermostat—1000 watts, 115 or 230 volts . . . \$4.50
BT bulb thermostat—1725 watts 115 volts, or 3450 watts 230 volts . . . 15.00
Instructions furnished with each order.

Commercial Discounts (15% on orders of \$20.00 or more (retail value) 30% on orders of \$100.00 or more (retail value))

CONSULT US ABOUT YOUR CABLE REQUIREMENTS

GRO-QUICK SALES

DEPT. 7A, 10342 LANARK, DETROIT 24, MICH.

SNOW FENCE is IDEAL for

**WINDBREAKS
SHADING
ENCLOSURES
LATH HOUSES**

Two Types Now Available

Standard Snow Fence 45 to 48 per cent Shade
Special Snow Fence 55 to 58 per cent Shade

PROMPT SHIPMENTS

Write for specifications and prices to:

PHILIP HARTIGAN, Road Equipment and Supplies

P. O. Box 283

HONESDALE, PA.

in the sap, fermentation occurs and gases are liberated which combine with the sap to create a pressure of 10 to 15 pounds inside the tree where normally the pressure would be no more than one pound. These unusually high pressures also occur throughout the year with the maximum pressure appearing in late August. By late January and February the pressure has subsided to that of a normal tree, and it is at this time that trees having wetwood disease should be pruned, according to Dr. Carter.

Chemical analysis has shown that these gases are composed of 46 per cent methane, 34 per cent nitrogen, 14 per cent carbon dioxide, 5 per cent oxygen and 1 per cent hydrogen. In no way have these gases been found toxic to any part of the tree.

Damages to the trees that have wetwood disease may be manifested either internally as a direct result of the toxic action of the sap or externally as a result of the bleeding or fluxing of the sap through open wounds, frost cracks or crotch cracks in the tree. Whenever fluxing occurs, it may be attacked by other types of fermenting bacteria on the outside of the tree. This results in a slim fluxing condition and, while it presents an unsightly appearance and prevents normal callusing at wound areas, it has nothing to do with wetwood disease.

Where an accumulation of sap, which contains excessive amounts of potassium and possibly other compounds, is carried up through the branches, the internal manifestation of the disease is wilting and eventual yellowing and falling of the leaves or sometimes leaf scorching. Brown discoloration, appearing as streaks in the current year's growth of the tree branches, is common to wetwood, dothiorella and Dutch elm diseases and so it is not an accurate diagnostic symptom.

Dr. Carter gave some precise recommendations for treating wetwood disease. He stated that pruning out diseased branches containing the

ARROW/NAMSCO PEATS = SALES REPEATS



Prompt Shipments
"HOLLANDIA" BURLAP
SQUARES
REED MATS

for Coldframes

Write for Prices
State Requirements

NEW AMSTERDAM IMPORT CO.
122-A Chambers St., New York 7, N. Y.

How to Increase Your Profits Through MODERN LANDSCAPING

Landscaping has a new look! Bring yourself up to 1955 in a field that has completely changed since World War II. Keep ahead of your nursery clients and make big profits. Norman A. Morris, internationally known landscape architect, specialist in home grounds design and plantings, will personally direct your home study training. Portions of our course now used in over 30 major colleges and universities throughout the United States. Many leading nurserymen take our course and buy it for their employees. Send for New FREE Catalog, "Modern Landscaping."

NATIONAL LANDSCAPE INSTITUTE

The Modern Landscape School

310 S. Robertson Blvd. Dept. W-25A LOS ANGELES 40, CALIF.



Hawaiian FERNWOOD TREE FERN TOTEM POLES

NOW!

20

DIFFERENT SIZES

Catalog Available on Request.

FERN HAWAII CO.

P. O. Box 216, WILMINGTON, CALIF.

Mention The American Nurseryman when you write.

PLANT IT any time USE CRYSTAL No-Dri LIQUID WAX

Used for over 20 years to reduce wilting and setback of transplanted broad-leaved and coniferous evergreens, deciduous trees, flowering shrubs, etc. Safe on plant tissue; paint or spray it. Extend transplanting and landscaping through hot weather.

55-gal. drum...\$63.25 30-gal. drum...\$37.50

5-gal. drum...\$7.25

All prices F.O.B. Philadelphia, Pa.

CRYSTAL SOAP & CHEM. CO., Inc.
6300 State Road, Philadelphia 35, Pa. Dept. AN.

EDCO IRON

The new chelated organic iron*

Recommended for trial for Chlorosis of Azaleas, Gardenias, Citrus, Roses and similar plants.

1 or 2-lb. bags.....\$2.00 per lb.
10-lb. drums.....1.50 per lb.
50 or 100-lb. drums, \$1.10 per lb., delivered.

Usually applied at rate of 1/2 to 1 oz. per 100 sq. ft.

DIRECTIONS ON LABEL

*Contains "Sequestrene" Brand

EDCO CORP.

ELKTON, MD.

You can't beat the Band

NEW CYPRESS PLANTBANDS

★ DON'T STEAL YOUR SOIL NITROGEN.
★ LAST SEVERAL TIMES LONGER THAN OTHER VENEER BANDS.
★ MAKE POSSIBLE FASTER EASIER PLANTING.
★ MAKE THE PLANTING SEASON LAST A LOT LONGER

WRITE FOR FREE PLANTBAND FOLDER

FORREST KEELING NURSERY ELBERT, MO.
MCLEAN BULB FARMS PUYALLUP, WASH.
APPALACHIAN NURSERIES WAYNESBORO, PA.

wilted leaves does nothing to eliminate the disease. Since wilting of the leaves is seldom fatal to the branches, pruning should be delayed and immediate steps taken to stop the fluxing by installing drainage tubes at the base of the tree trunk. A hole should be drilled into the trunk so that it will transverse the area of sap accumulation. Into this hole is driven the drainage tube to a depth of not more than three inches. Such a wetwood area can be determined by securing saplings of the cross section of the wood with an increment borer. The wetwood section of a bore will disintegrate into many pieces. Pressure is localized only in the infected area, and so an increment borer equipped with a pressure gauge would also be useful for diagnostic work.

He advised that fluxing at a frost crack may occur without the presence of wetwood disease, and in this case such fluxing might continue even after installation of a drainage tube. Where an increment borer is used, such a condition can be determined before a drainage tube is needlessly installed.

When a tree has wetwood disease, Dr. Carter stated that it is advisable to fertilize the tree at the time of installing the drainage tube. He expressed the opinion that there is no way of actually eliminating the disease after it has become established in a tree. After the fluxing is stopped by the installation of drainage tubes, however, little harm appears to be done to the tree by the continued presence of the pathogen.

There are certain precautionary measures that should be exercised to prevent the spread of wetwood disease. All tools should be disinfected after being used in a diseased tree. No unpainted wound should be left, since it is through these that the pathogen might enter. Likewise small limbs that die out from being shaded should be removed regularly and these wounds painted thoroughly.

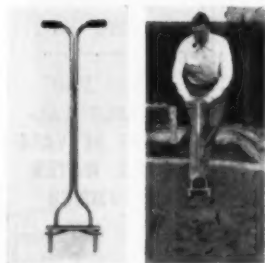
Dr. Carter emphasized that slim fluxing on the bark of trees frequently results from a condition associated with the fermentation of the sap in the cambium. This condition can be eliminated by simply scraping away the diseased portions of the cambium.

Chelated Iron

"The Use of Chelated Iron in Chlorosis Control" was discussed by a panel led by Dr. L. C. Chadwick. Panelists were Dr. J. R. Kuykendall, Geigy Agricultural Chemicals Re-

SOIL AIRE

SOIL AERATING MACHINES



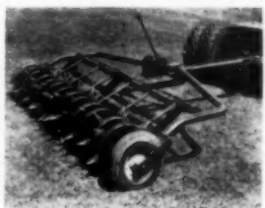
DELUXE HAND TOOL

This tubular steel tool cores and ejects a plug of soil with each insertion into the ground. Has hollow tapered replaceable tines and is ideal for small lawns. Over 26,000 in use.



MOTORAIRE

Hundreds of landscape contractors have found this machine very profitable in doing commercial aeration. Every home owner a prospect. Capacity 7500 sq. ft. per hour.



RENOVATAIRE

Here is a new tractor drawn renovating machine for big jobs. Has 22" wheels with adjustable curved saw-toothed knives that slice, cultivate and renovate the roots without ripping the surface. Transports itself.

SEND FOR CATALOG TODAY

SOIL AIRE Industries

Soil Aerating Machines • Power Rollers • Transmissions
MINNEAPOLIS 3, MINNESOTA

Please Mention AMERICAN NURSERYMAN When Writing Advertisers.

Ideal Garden Gadgets...
Sell them in '55
Enjoy added profits.
Send for folder today.
LANSING SPECIALTIES MFG. CO.
Dept. AN55, 918 Clark Rd. LANSING 17, MICH.

"Make Top-Soil Out of Sub-Soil"
Transform raw sub-soil into fertile lawn or garden soil. Just work in **HYPER-HUMUS**, the Organic Soil Vitalizer.
Write for Top-Soil Bulletin.
Hyper-Humus
★ COMPANY ★ BOX 31, NEWTON, N. J.

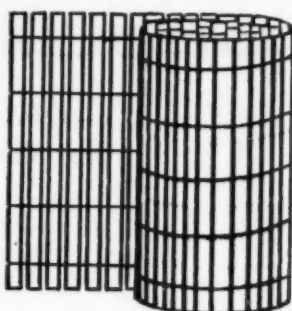
FERTO-POTS MILLIONS USED
PLANT EATS POT
Per ton C.L.
FERTO-GERM, Compost, Manure.....\$ 48.00
MULCHNUR, 3-6-3 All Organic..... 60.00
BONE MEAL RAW IMT..... 60.00
GARBAGE TANKAGE, 3 1/2 per cent Am..... 18.00
SE-BO-PHOS, 20 per cent T.P. Acid..... 18.00
FEATHER TANKAGE, 17 per cent Am..... 130.00
Write for Price List, Small Quantities.
ALLEN CO., PITTSBURY 3, N. J.

Aluminum Plant Tags
ALLEN TAGS
Write for sample and prices.
ALLEN WEATHERPROOF TAG CO.
Box 481 SPRINGFIELD, O.

SOUTHLAND NURSERY SHADING

*Manufactured
Especially for
Nurseries
Desiring The
Correct Amount of
Controlled Shade.*

**PROVIDES
YEAR
AROUND
PROTECTION!**



**WARDS OFF
WINTER'S ICY
BLASTS AND
LEAF-NIPPING
FROSTS**

**SAVES YOU
UNTOLD GAL-
LONS OF VALU-
ABLE WATER
IN SUMMER**

Made of smooth-sawn, yellow pine, 2 1/4 x 3/8-in. lath spaced 1 1/2 ins. apart, tightly woven together with heavy galvanized wire and dipped in either a red or green preservative.

IT'S STRONGER AND LASTS LONGER THAN OTHER TYPES OF SHADING . . . COSTS LESS THAN MOST AND IS EASY TO INSTALL.

New 1955 Factory Prices, Per 50-ft. Roll, F.O.B. Avinger, Tex.

Width	Sq. Ft.	Approx. Weight	Painted Red	Painted Green
4 ft.	200	140 lbs.	\$9.50	\$10.00

Delivery service available at cost.

F. A. MACKENZIE MFG. CO.

Box 535, AVINGER, TEX.

Southwestern Representative

VERHALEN NURSERY
Company
SCOTTSDALE • 12140 HARRY HINES BLVD.
TEXAS DALLAS, TEXAS

SUNOX STOPS FUSARIUM WILT OF CARNATIONS

Here is the product that is allowing growers to double their carnation yields. Thoroughly college-tested and field-proven, Sunox is a new and effective chemotherapeutic drug that gives uniformly high results against Fusarium Wilt—as much as 100 per cent protection.

It costs less than 2c to treat 8 square feet of cuttings in flats or benches.

Sunox has proven itself, too, in the prevention and curing of damping-off and rhizoctonia-caused diseases in almost all green and woody plants. It is being used with remarkable success on cutting benches of taxus, rooted cuttings of rhododendrons, azaleas and arborvitae.

Sunox comes in powder form. It is easy to mix with water at 1 oz. to 20 gallons. Noninjurious to leaf or plants.

**MIDVALE
CHEMICAL COMPANY**
LODI, NEW JERSEY

Dutch and Domestic BURLAP

Established 1925

Importers—Manufacturers

Distributors of Bird Pots
and Lario Nurseries

New York Representative:

Harry Ramp
400 Woodfield Rd.
West Hempstead, N. Y.
Phone: Ivanhoe 3-6153

New Jersey Representative:

A. H. Gutbrod
162 Ward Pl.
South Orange, N. J.
Phone: So. 2-8504

J. SHORE & CO.
CHELSEA, MASS.

WOOD LABELS

For Nurserymen

**DAYTON
FRUIT TREE LABEL
CO.**

Ray and Kiser Sts. DAYTON, O.

search Laboratory, Bayonne, N. J.; H. N. Engledow, Midwestern Tree Experts, Indianapolis, Ind.; T. W. Parke, Parke-Speed Tree Service, Columbus, O., and E. A. Sanford, William A. Natorp Co., Cincinnati, Ohio.

Dr. Kuykendall began the discussion by defining chlorosis as a condition of plants characterized by a deficiency of chlorophyll in the foliage and caused by nutritional deficiency within the plant. When iron is the deficient nutrient, interveinal yellowing develops in the leaves, while the midrib and veins remain green. This deficiency may be caused by a lack of iron in the soil, but most frequently it is believed to be due to conditions in the soil, such as a high pH or excessive amounts of calcium or magnesium, which prevent the iron from entering the plant by rendering it insoluble.

"Chelating agents," stated Dr. Kuykendall, "are organic compounds that surround an element and hold it in a water-soluble form so that it can be absorbed by the roots of the plant." This is not an uncommon phenomenon in nature, as chlorophyll is known to act as a chelate on magnesium and citric acid is a chelating agent for iron. However these are readily decomposed by soil microorganisms, and so in commercial practice, an amino acid type of chelate is used which will withstand such decomposition.

It has also been observed that chelated iron will produce other beneficial effects besides aiding in the restoration of chlorophyll to the leaves. On normally green citrus trees and grapevines, the addition of chelated iron to the soil has resulted in increased yield, and this yield has been pushed even higher when a nitrogenous fertilizer is applied along with the iron chelate. Turf has also responded favorably to applications of iron chelate.

Dr. Kuykendall reported that chelated iron may be applied to the soil in dry form and watered in or else it may be applied along with a dry fertilizer. Treatments of iron chelate have been successful in restoring the chlorophyll content in leaves of gardenias, rhododendrons, azaleas, honeysuckles, spiraeas and many other ornamental plants.

Mr. Engledow reported on the practical experience that he has had in treating pin oaks with chelated iron. The material was broadcast over the soil beneath the trees in March and April at the rate of one-fourth pound for each inch of tree trunk diameter. The trees leafed out

much greener than in previous years and continued to green up all through the growing season.

Ted Parke stated that he had mixed one pound of the iron chelate with 10 gallons of water and sprayed the solution onto the soil at the rate of two and one-half pounds to each 8-inch tree. Fertilization with a 10-6-4 fertilizer was necessary before any response was seen.

Mr. Parke also described some adverse effects that he had had with the chelated iron, but he explained that he had used it in a manner different from that recommended. It was mixed at the rate of one pound to 25 gallons of water and sprayed on dormant trees. The trees failed to leaf out until midsummer, when leaves developed from secondary buds.

Mr. Sanford first used chelated iron in 1952. At that time he mixed one pound of iron chelate with 100 pounds of fertilizer and placed this mixture in soil holes about pin oaks and azaleas during May through August. When the job of filling the holes was finished, the soil was watered thoroughly. Within three weeks good green foliage had developed. Mr. Sanford stated that he has had equally good results when two pounds of chelated iron was mixed with 100 gallons of water and sprayed on the foliage of azaleas, rhododendrons and other broad-leaved evergreens.

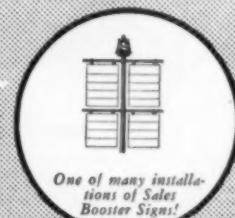
Dr. Kuykendall cautioned that overdosing, even from soil applications, would result in leaf scorch. Retreatments should be made as soon as chlorosis reappears, although to date pin oaks that were treated two years ago still have good green foliage.

An arboriculture clinic, moderated by Dr. Paul E. Tilford, executive secretary of the National Arborist Association, Wooster, Ohio, concluded the afternoon program. Dr. Tilford invited Dr. Ralph B. Neiswander, J. Melvin Easterday and Dr. J. C. Carter to act as advisers on the clinic. Those attending the meeting presented many questions that were answered by the various members of the clinic.

Dreams

In the evening the group assembled for a pleasant dinner at the Neil House, after which Carl Fenner, city forester, Lansing, Mich., and president of the National Shade Tree Conference, philosophically presented an illustrated talk relating practices and investigations in which he has engaged in attempting to answer many of his "dreams."

For greater **VOLUME**
bigger **PROFITS**... install
Sales **SIGNS**
Booster



Here's what Mr. Julian Herman, owner of Universal Nursery, North Hollywood, California, has to say about **SALES BOOSTER SIGNS**:

"My sales have shown a nice increase since I installed my **SALES BOOSTER SIGN**! It gives me a way

to call attention to the things I sell. I've found it to be a very valuable sales aid—one I would not want to be without!"

Mr. Herman, like other progressive nurserymen, knows that when you tell what you sell, you sell **MORE!**

**MAIL
COUPON
TODAY**

**GROWERS
SIGN SERVICE
Dept. AN-1,
Tallmadge, Ohio**

GROWERS SIGN SERVICE, Dept. AN-1, Tallmadge, Ohio

Gentlemen: Please send, without obligation, illustrated folder and price list for **SALES BOOSTER SIGNS**.

Name.....

Street.....

City..... Zone..... State.....

SHRUBS AND VINES FOR AMERICAN GARDENS, by Donald Wyman. Planting guide for florists and nurserymen. **\$7.50.** American Nurseryman, Chicago 4, Ill.

Top-Quality

Dutch and Domestic

**BURLAP SQUARES
TWINES**

Jute—Sisal—Binder Twine

Write for our low prices and samples.

HALPERN BROS.

272 S. 2nd St., PHILADELPHIA 6, PA.

REMEVE

Quality budding, grafting and pruning knives and shears. Manufactured in Germany.



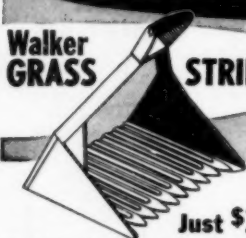
Ask for folder.

**PLUCKEMIN
HORTICULTURAL WHOLESALE**
Pluckemin, N. J.

HARVEST NEW PROFITS

with this
Money-Saving Tool for
Do-It-Yourself Gardeners

**Walker
GRASS
STRIPPER**



Just \$1195 list

The high price of good grass seed makes this item hotter than a pistol! Now—instead of paying big money for commercial seed—your customers can gather their own blue grass and other expensive lawn seeds... and the only cost is a few hours labor. Made of sturdy, lightweight aluminum with plastic covered handle, the Walker Grass Stripper weighs only 2 lbs. An easy swing removes and gathers seed. Includes complete instructions for use. Nationally advertised in American Home, Better Homes & Gardens, House & Garden and Household Magazine. Terrific profit margin! Use the coupon below to get all the money-making details!

Walker Mfg. & Sales Corp., 1707 Penn. St. Joseph, Mo.

Walker Mfg. & Sales Corp.
1707 Penn St., St. Joseph, Mo.
Rush full facts and dealer discounts on your new Grass Stripper. Sounds like a natural for "do-it-yourself" sales.

Your Name _____
Company Name _____
Address _____
City _____ State _____



FLORIDA FLAMINGOS

Made of aluminum castings to last a lifetime. Full body shape; about 30 ins. high. Enamelled flamingo-red with black beak, eyes and wing tips. Legs are purple. Packed 6 pair to the box; wholesale price \$4.90 per pair, F.O.B. Louisville, Ky. Weight about 30 lbs. per box.

HITCHING POST BOY

Made of aluminum castings. Full body shape; 37 ins. high. Enamelled white, green, red and black. Wholesale price \$22.50, express collect. We pay the freight on any combination order for \$80 or more.



CERTIFIED PRODUCTS CO.
Dept. AN
Louisville 11, Ky.
We also make a line of cast aluminum religious plaques.

CHICK-A-DEE SQUARE SPRINKLER

Commercial irrigation head valued to sprinkle square areas evenly—no overlap, no runoff. Covers areas 25x25 ft. to 80x80 ft. \$4.95 each.

Distributed by
CHICK-A-DEE GARDENS NURSERY
Rt. 2 SHERWOOD, ORE.

Mr. Fenner suggested that care of street trees is a three-party responsibility; of the city, property owner and utility company. He showed color slides to confirm his dream that bark can be encouraged to grow back where the tree trunk has been peeled of its old bark. To accomplish this, he places a shade screen of burlap around the tree trunk within eight inches of the wound, leaving both the top and bottom open to permit good air circulation. He has found that verticillium wilt of maples may be controlled by dehorning the tree, and this, of course, has been the answer to another dream. Some measure of success has been had in preventing the flowers of certain tree species from setting fruit. Mr. Fenner prefers to leave the feathered growth of small branches on the tree trunks. This he feels, enhances the tree's beauty and protects the trunk in some minor way from the direct rays of the hot summer sun.

In his work with chlorotic trees, Mr. Fenner is satisfied that, when treated with the new iron chelates, the normal green color can be restored to the foliage of these trees. Girdling roots have been a difficult problem, but now Mr. Fenner believes he has realized the answer to another dream. By cutting away strips of bark at the top surface of the girdling root and also at the tree trunk just above where the girdling root has grown, he has observed that callus growth develops which eventually amalgamates the root into the tree.

WILLIAM J. SMART, of D. Hill Nursery Co., Dundee, Ill., went to the Sherman hospital, at Elgin, February 2, for two or three weeks for observation.

FOLDER ON BUILDING SALES

A free 4-page folder on stimulating ornamental nursery stock sales is announced by the L. W. Ramsey Co., Davenport, Ia., publishers of the monthly "Landscape Letter."

Offered on the Landscape Letter's 32nd anniversary, the folder suggests a method for nurserymen to obtain their share of the 1955 home-building market estimated at \$12 billion. In addition, the folder discusses selling in a competitive market and establishing leadership in the community. The folder can be obtained on request.

A NEW nursery at New Richmond, Wis., is Tjader & Highstrom Tree Service.



A Rewarding Side-Line or Profitable Full-Time Business Can Be YOURS.

MANUFACTURE ATTRACTIVE, EVERLASTING CONCRETE LAWN AND GARDEN SPECIALTIES

A few easy-to-operate CMC ALUMINUM MOLDS—honored as the Industry's BEST—and YOU are in the business.

Prepare for the spring rush NOW!

Write for illustrated catalog.

CONCRETE MACHINERY CO.

Dept. AN
HICKORY, N. C.



IT PAYS

To Test Your Soil
Grow Top Quality
at Lower Cost

Today, no grower can make as much money as he should, without Soil Testing. Don't be content with average grades and get only average prices when it's so easy to produce choice and fancy stock!

Top market prices and heavier production per bench are guaranteed every owner of a **SUDBURY SOIL TEST KIT**. Prevents starving plants, or stunting them with toxic soil. Can be used on soil already in benches, even on growing crops. Turn poor benches into top production, and keep them there.

So Simple Anyone Can Use It!

Easy as reading a thermometer—takes only 10 minutes, costs 10c a test. No waiting—tells instantly what to do. **Order Today!**

Let It Pay for Itself

SEND NO MONEY—

pay postman only \$4.95

plus postage, then

monthly payments

of \$1.75 each.

Or send \$29.95

and we'll prepay,

saving you \$1.25

to \$2.50 in postal

charges.

BETTER CROPS

GUARANTEED—

your money

refunded anytime

within a year—

less fully satisfied.

Sudbury Laboratory, Box 885, South Sudbury, Mass.

Dealers: Write for Special Offer!

ROOTSPRED TREE PLANTER

Now there is a husky, fast (over 1000 per hour) tree seedling planter for reforestation, Christmas tree and ornamental planting. Made for Ford, Ferguson, 3-point hitch. For picture and information, write

SAM DIBLE NURSERY
R.F.D. 3 SHELLECTA, PA.